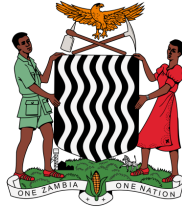


REPUBLIC OF ZAMBIA



MINISTRY OF HEALTH



NATIONAL MALARIA ELIMINATION BUSINESS PLAN 2018-2020

APRIL 2018

NATIONAL MALARIA ELIMINATION CENTRE
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Acknowledgements

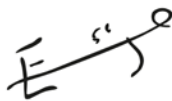
The development of this National Malaria Elimination Business Plan has been made possible through the collaboration of malaria stakeholders and partners. I would like to express my sincere gratitude, on behalf of the National Malaria Elimination Centre (NMEC), Ministry of Health, for the financial and technical assistance provided by the following the government ministries, institutions, organisations, and individuals: The Ministry of Finance (Public Private Partnership Department), Ministry of Health (Department of Planning), the PATH Malaria Control and Elimination Partnership in Africa (MACEPA); the United States Government President's Malaria Initiative (PMI); PMI/Programme for the Advancement of Malaria Outcomes (PAMO); the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM); the World Health Organization (WHO); Mr. Solomon Simutowe (MoF-PPP); Mr Mannix Ngabwe(MoH-HQ); Dr. Anthony Yeta (NMEC); Dr. Mutinta Mudenda Chilufya (NMEC); Dr. Busiku Hamainza (NMEC); Dr. John Miller (PATH/MACEPA); Dr. Abdi Mohamed (PATH/MACEPA); Dr. James Banda (MACEPA/PAMO); Mr. Amu Mudenda (NMEC); Ms. Pauline Wamulume (NMEC); Mr. Ernest Kakoma

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I wish to acknowledge and pay tribute to the Honourable Minister of Health, Dr. Chitalu Chilufya, and the Permanent Secretaries, Dr. Jabbin Mulwanda (Health Services) and Dr. Kennedy Malama (Administration), for their leadership and for prioritizing malaria as a major public health concern.

Finally, I would like to thank the editing team.

A handwritten signature in black ink, appearing to read 'E. Chizema-Kawesha', with a stylized flourish at the end.

Dr. Elizabeth Chizema-Kawesha
Director, National Malaria Elimination Programme
Ministry of Health

Preface

The Ministry of Health of the Republic of Zambia, in collaboration with partners, has developed the National Malaria Elimination Business Plan 2018-2020. This document is a product of a collaborative effort by all the partners of the National Malaria Elimination Program- who undertook a costing exercise to estimate with reasonable precision the financial needs of the next three years and consider possible financing mechanisms.

The business plan is designed to bring partners together to provide scaled and sustainable financing to both measure progress and achieve malaria elimination. To achieve the malaria elimination targets, it will be imperative to mobilize the requisite resources in a coordinated and collaborative approach.

As Zambia works towards elimination, appropriate recognition and support for its efforts is crucial. This document seeks to initiate a process of evidence generation that will support and inform Zambia's efforts, and will draw

attention to the financing gaps that must be filled in order to realise the vision of a malaria-free Zambia.

I trust that this document will ensure the mobilization of the requisite resources in a coordinated and collaborative approach.

A handwritten signature in black ink, appearing to be 'C. Chilufya', written in a cursive style.

Hon. Dr. Chitalu Chilufya
MINISTER OF HEALTH
MINISTRY OF HEALTH

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1. Vision

A malaria-free Zambia.

2. Purpose

This document is designed to bring partners together to provide scaled and sustainable financing to both measure and achieve malaria elimination.

Scaled financing entails mobilising the resources to fully finance the elimination agenda from domestic and international resources, as well as public and private resources. Sustainable financing secures universal access to all elimination interventions for every Zambian citizen by capturing the benefits of economic growth and addressing the potential of transitioning from low-income to middle-income status. At the heart of the business plan is a rigorous focus on achieving and measuring results. This plan also envisions a strategy that maximises the comparative advantages of a broad set of partners; these partners are engaged with an elimination platform under the leadership of the Zambian government.

A conducive environment—including political, social, financial, operational, and technical factors—is imperative for successful malaria elimination. History has demonstrated that every country or region pursuing elimination must thoroughly assess its situation and develop a strategy for elimination and prevention of reintroduction. From an operational perspective, one crucial difference between programmes focused on maintenance of controlled malaria and those pursuing elimination is the adoption of a comprehensive system for detecting, reporting, and responding to any imported cases and potential outbreaks. In order to achieve elimination, this system will need to be robust and collaborative between private- and public-sector providers, and the broader health system must be well-managed and continuously improving.

3. Development objective

The objective of this business plan is to mobilise USD 95,122,125 to bridge the financing resource gap for the implementation of the malaria elimination strategic plan during the period of 2018 to 2020.

4. Specific objectives

- Mobilise USD 10,686,696 to support the scale-up of community case investigation within the period of 2018 to 2019.
- Mobilise USD 60,998,834 to support the implementation of mass drug administration (MDA) to optimal scale during the period of 2019 to 2020.
- Mobilise USD 8,038,149 to finance operational costs for the mass distribution campaign of long-lasting insecticide-treated nets (LLINs) in 2020.
- Mobilise USD 7,896,176 to finance larval source management.
- Mobilise USD 1,000,001 to finance management capacity strengthening at the provincial and district levels.
- Mobilise USD 1,000,000 to strengthen entomology surveillance.

5. Zambia Elimination Strategic Plan

Zambia has embarked on an ambitious plan of action to eliminate malaria nationwide by the end of 2021. The rationale for undertaking a malaria elimination strategy in Zambia at this time is based on the following:

- There has been substantial progress in recent years towards addressing malaria.
- Malaria incidence in many districts has been reduced to levels where transmission interruption is a feasible objective.
- A delay in addressing elimination allows the problem of drug and insecticide resistance to emerge, making both malaria elimination and control more challenging in the future.
- The Government of the Republic of Zambia has made substantial direct financial commitments to control malaria, which have led to the goal of elimination.
- Solid scientific evidence has accumulated over the last decade on approaches for addressing malaria, and new elimination tools that are on the horizon.
- Zambia has demonstrated the effectiveness of deploying these new approaches and the tremendous impact on accelerating reduction of disease to elimination levels in Southern Province within a very short period.
- Effective mechanisms are being established to ensure proper coordination of malaria elimination activities with neighbouring countries, particularly where there is

movement across international boundaries.

- There is significant political and financial commitment from neighbouring countries and partners to achieve a greater impact and to eliminate malaria.
- International attention and political commitments towards malaria elimination have been mobilised in recent years and are being translated into real actions to plan and implement an elimination intervention package in Zambia.

6. Scaled and sustainable action for results

6.1 Technical intervention packages

Malaria elimination plans in Zambia will be based on transmission levels (see Table 1), as well as on the following variables:

- In higher transmission settings (Levels 2–4): Strategies will aim to scale up the coverage of effective curative and preventive interventions, and strengthen information systems to ensure that each case is reported and followed.
- In lower transmission settings (Levels 0 and 1):

Surveillance and response will serve as the core interventions, informed by population-based reporting from health facility catchment areas (HFCAs) with reliable case notification (≥ 95 percent reporting completeness).

Table 1: Malaria transmission settings.

LEVEL	MALARIA INDICATOR
LEVEL 0	0 cases, No local transmission
LEVEL 1	1–49 cases/1,000 population; No detectable impact with parasite prevalence measurement
LEVEL 2	50–199 cases/1,000 population; 0.5%–<5% parasite prevalence
LEVEL 3	200–499 cases/1,000 population; 5%–<15% parasite prevalence
LEVEL 4	>500 cases/1,000 population; >15% parasite prevalence

The objectives of the national elimination programme will have been achieved when:

1. Locally acquired malaria cases have been reduced to zero.
2. The health services and surveillance operations are fully capable of preventing reintroduction of malaria transmission.

After elimination has been achieved, prevention of the reintroduction of malaria transmission and the maintenance of malaria-free status will continue to be the responsibility of all relevant stakeholders. This will require the implementation of specific intervention packages, as outlined in Table 2.

Table 2: Recommended intervention packages per malaria transmission level.

LEVEL	MALARIA INDICATOR	INTERVENTION PACKAGE/ACTIVITIES	ACCELERATOR
LEVEL 0	0 cases, no local transmission	<ul style="list-style-type: none"> No malaria, maintenance of malaria-free zone High quality surveillance and vigilance Vector control and case management Epidemic Preparedness package Case investigation capacity maintained Chemoprophylaxis 	
LEVEL 1	1–49 cases/1,000 population/yr; Typical range <1% parasite prevalence	<ul style="list-style-type: none"> Very-Low malaria transmission High quality surveillance Vector control (possibly enhanced) Community and facility-based case management Case and foci investigation 	<ul style="list-style-type: none"> Mass drug administration
LEVEL 2	50–199 cases/1,000 population/yr; Range 0.5%–<5% parasite prevalence	<ul style="list-style-type: none"> Low malaria transmission Build high quality surveillance Vector control (possibly enhanced) Community and facility-based case management Establish case and foci investigation capacity 	<ul style="list-style-type: none"> Mass drug administration
LEVEL 3	200–499 cases/1,000 population/yr; Range 5%–<15% parasite prevalence	<ul style="list-style-type: none"> Moderate malaria transmission Improve quality surveillance Vector control (possibly enhanced) Facility-based case management; build community case management and outreach Establish case and foci investigation capacity 	<ul style="list-style-type: none"> Mass drug administration (may be considered for specific areas with case investigation capacity) Enhanced vector control if relevant
LEVEL 4	>500 cases/1,000 population/yr; Range >15% parasite prevalence	<ul style="list-style-type: none"> High malaria transmission Build quality surveillance Vector control to high coverage (100% coverage of IRS or sustained high coverage of LUNs) Facility-based case management; begin to build community case management and outreach Prepare for case and foci investigation capacity 	<ul style="list-style-type: none"> Prepare for mass drug administration Enhanced vector control if relevant

Explanatory notes:

- **Surveillance:** Parasitological and entomological surveillance, and the potential use of molecular testing techniques for monitoring at the clinic and community levels.
- **Vector control:** Vector control at high coverage (100 percent indoor residual spraying [IRS] coverage of eligible structures or LLINs).
- **Enhanced vector control:** Introduction of additional interventions where specifically appropriate (e.g., larviciding, baited traps, space spraying, co-deployment of vector control interventions, etc.). Vector surveillance (i.e., abundance, species, resistance) to direct updated action.
- **Facility-based case management:** Malaria infection surveillance at the health facility level, including diagnostic confirmations with rapid diagnostic tests (RDTs) and treatment; strengthened microscopy; (potentially) more sensitive tools; quality assurance of diagnosis and treatment; and supervision of community-level case management.
- **Community case management:** Extension of infection

detection and case management into communities through community health worker outreach, including integrated community case management.

- **Malaria case investigation/malaria foci investigation and transmission containment:** Extension of case surveillance at the community level, including reporting of confirmed cases; investigation of households and local neighbourhoods; identification and detection of ongoing transmission foci; and active clearance of local transmission.
- **Malaria elimination accelerator strategies (e.g., mass drug administration [MDA]):** Time-limited and geographically targeted population-wide treatment aligned with the national treatment guidelines (80 percent coverage) to clear the infectious reservoir (e.g., enhanced vector control strategy).
- **Chemoprophylaxis:** When Level 0 is attained in all health facility catchment populations, preventive chemoprophylaxis may be implemented as needed, depending on vulnerability.

6.2 Health promotion

The Government of the Republic of Zambia has placed health promotion high on its agenda in order to prevent disease and promote health through a primary health care approach.

A national malaria elimination campaign using the slogan ‘Malaria Ends With Me’ is helping to organise all malaria activities and partners—including the private sector—under a united theme, and is amplifying the reach of elimination communication efforts. At the community level, the campaign ensures that community meetings and household testing are not isolated measures, but are part of a larger long-term effort led by the Ministry of Health. Guided by provincial and district personnel, communities involved in this campaign will better understand their roles in making and keeping their populations free of malaria, and will take pride in doing so.

Specific health promotion objectives include the following:

- Increase knowledge levels of malaria from the MIS 2015 baseline to 100 percent by 2020.
- Improve uptake and correct use of key malaria

interventions from the MIS 2015 baseline to 90 percent by 2020.

6.3 Advocacy through key leaders

Advocacy and social behavioural change communication (SBCC) will anchor health promotion efforts by utilising household and community settings to increase and sustain malaria elimination efforts. At the national level, involvement of policymakers and decision-makers in health will aim to keep national attention on malaria elimination, particularly on the provision of adequate resources. Engaging community leaders (such as chiefs and pastors) will also play a critical role in community acceptance and use of proven malaria interventions.

6.4 Social behavioural change communication and knowledge management

The health promotion agenda will include house-to-house campaigns in order to create champion communities for malaria elimination. These champions become peer behavioural change agents. The purpose of SBCC activities is to increase knowledge, awareness, and risk perception among individuals; to mobilise communities to create long-

term changes towards desired behaviours; and to sustain positive behaviours around the key malaria elimination interventions.

6.5 Health system strengthening

While Zambia has shown strong economic growth, the health system is still developing (relative to those in countries that have eliminated malaria) in terms of human resources, provision of health services, financing, information systems, and governance. These health system functions are of particular concern, and will be analysed at the highest level of the Ministry of Health, as well as (possibly) at the cabinet level for decision-making and elimination planning.

6.6 Cross-border collaboration

Zambia is a part of the African Union (AU), Common Market for Eastern and Southern Africa (COMESA), WHO African Region, Southern Africa Development Community (SADC), African Leaders Malaria Alliance (ALMA), and Malaria Elimination 8 (E8) groupings, among other consortia. Engagement with these groups and with neighbouring countries promotes the exchange of malaria-related

information of mutual interest, notification of malaria cases or epidemics in border areas, organisation of border meetings, and participation in international trainings. As progress towards malaria elimination in the region gathers momentum, it becomes necessary to strengthen international engagement and communication on cross-border collaborations that can quickly resolve any issues that could jeopardise elimination efforts. Such collaboration should be facilitated at the higher levels of governance (i.e., through the establishment of a regional taskforce that can coordinate sharing of data, information, and SBCC strategies, as well as harmonise and synchronise interventions across borders). Product quality is also a cross-border issue; there may now be a need for a well-coordinated and adequately funded regional programme involving relevant government agencies and stakeholders, including regional bodies.

In the context of malaria elimination, special attention must be given to situations in which there is a risk of transmission between countries. These situations will require joint statements on cross-border collaboration and the

development (or implementation) of joint action plans to facilitate malaria elimination measures in border areas.

7. Gap analysis

The overall projected funding need for the next three years is estimated at USD 337,155,464. Current commitments amount to USD 242,033,339. A gap of USD 95,122,125 represents the amount needed to accelerate to reach malaria elimination by 2021. The ambition to eliminate malaria comes at a crucial time when there is heightened political commitment from the Government of the Republic of Zambia, global efforts, and momentum. Malaria elimination is possible with renewed focus, new tools, and sufficient financial resources.

Figure 1: Gap analysis pie chart.

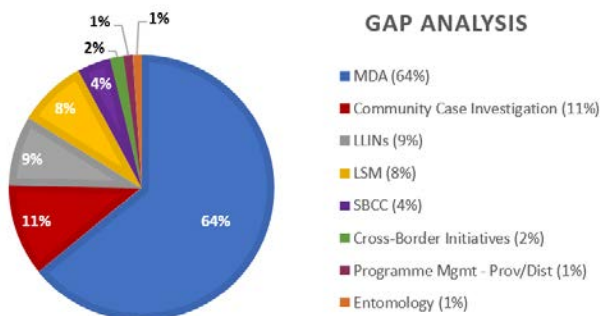


Table 3: Gap analysis summary.

ZAMBIA MALARIA FUNDING REQUEST 2018-2020. GAP ANALYSIS SUMMARY						
Intervention	Total Need (US\$)	Commitments (US\$)	Funding Gap (US\$)	Within Allocation (US\$)	GAP	
IRS	82,530,442	65,433,026	17,097,416	17,097,416	17,097,416	-
Entomology	3,999,813	1,958,000	2,041,813	2,041,813	1,041,813	1,000,000
Larva Source Management	7,896,176	-	7,896,176	7,896,176	-	7,896,176
LLINs	46,535,397	27,261,507	19,273,890	11,235,741	11,235,741	8,038,149
RDTs	29,528,059	26,080,197	3,447,862	3,447,862	3,447,862	-
Microscopes	630,500	-	630,500	630,500	630,500	-
Consumables	768,325	-	768,325	768,325	768,325	-
ACTs	36,024,656	19,682,452	16,342,204	16,342,204	16,342,204	-
Injectable Artesunate	5,885,521	5,885,521	-	-	-	-
Rectal Artesunate	64,800	64,800	-	-	-	-
ICTM	6,890,480	2,890,480	4,000,000	4,000,000	4,000,000	-
Community Case Investigation	13,003,770	2,317,074	10,686,696	10,686,696	-	10,686,696
MDA	64,326,797	3,327,963	60,998,834	60,998,834	60,998,834	60,998,834
SBC	14,120,175	7,795,299	6,324,876	6,324,876	2,444,742	3,880,134,40
Cross-Border Initiatives	1,622,135	-	1,622,135	1,622,135	1,622,135,00	-
Program Management (NMEC)	2,494,424	-	2,494,424	2,494,424	2,494,424	-
Program Management (Prov & Dist)	2,206,379	1,206,378	1,000,001	1,000,001	-	1,000,001
SMEOR	18,627,615	13,905,695	4,721,920	4,721,920	4,721,920	-
Total	337,155,464	177,808,392	159,347,072	159,347,072	64,224,947	95,122,125

8. The business case

8.1 Promising impact of country-wide booster action (2001–2009)

The trend of Zambia’s malaria burden (see Figure 2) over the period of 2001 to 2017 demonstrates the impact of coordinated evidence-based strategic action. In 2001, Zambia launched its ‘first generation’ strategic plan (2001–2005), focused on generating evidence for policy, strategy, and action to roll back malaria. Activities were implemented to test the efficacy of treatment regimens, approaches to deploying IRS, and scale-up of insecticide-treated net (ITN) use (later switching to LLINs). This plan also explored intra- and inter-sectoral strategies, as well as collaborations between the public and private sectors. The local business community—including Konkola Copper Mines; Zambia Sugar; the Roll Back Malaria (RBM) Partnership to End Malaria; the US Agency for International Development (USAID); the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM); various ministries; and a large number of other partners—responded and supported the implementation of this plan. Although much of the action was oriented towards evidence generation, there was a significant reduction in disease

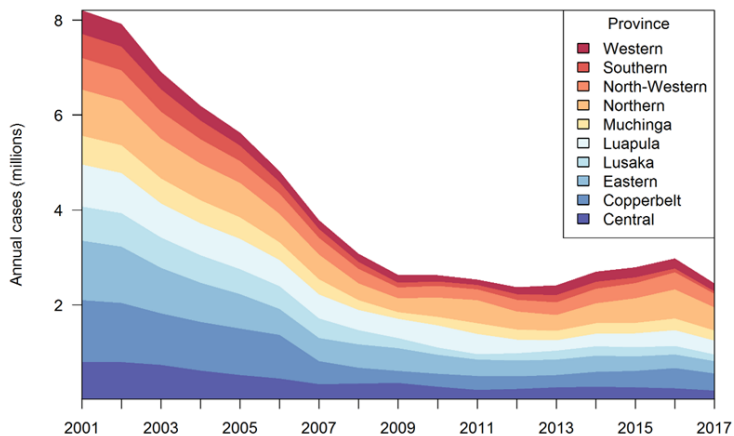
burden (as seen in Figure 2) between 2001 and 2005.

In an effort to leverage the evidence generated by its 2001–2005 strategic plan, Zambia launched its ‘second generation’ strategic plan (2006–2011), focused on the scale up for impact (SUFI) strategy. This strategy called for nationwide scale-up of IRS, LLIN use, and treatment with artemisinin-based combination therapy (ACT) as the new first-line regimen for malaria. To ensure implementation, the Zambian government secured dedicated funding from the World Bank (in addition to international and local partner support) to ‘boost’ the operation. Figure 2 below shows the impact of the nationwide scale-up of these interventions, seen as a marked reduction in malaria cases in all provinces from 2005 to 2009.

It is important to note that the following period of 2009 to 2017 shows evidence of plateauing progress. This may be an indication that the country managed to sustain the key interventions over this period, though further action would have been required to accelerate malaria transmission reduction and to stay on track for the goal of elimination by

2021. A second 'booster' in technical and financial intervention is now required to meet the desired elimination targets.

Figure 2: Annual malaria cases by province, 2001–2017.



Generated by MRC Centre for Outbreak Analysis and Modelling, Imperial College, London

8.2 Southern Province: Evidence of the impact of adding MDA combined with community case investigation to the existing interventions (illustrated by Figure 3)

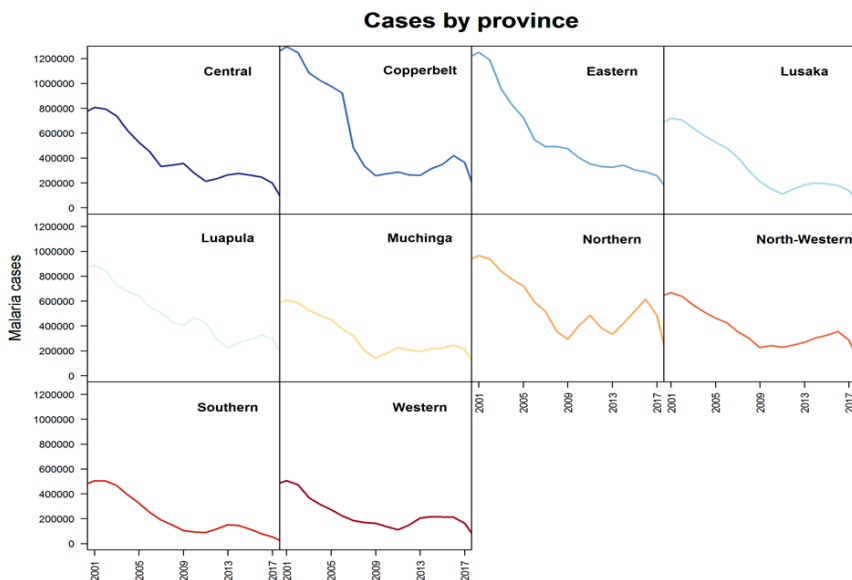
In Figure 3, nearly all of the provinces show a decline in malaria case numbers starting in 2009, with a relative reversal in these gains around 2013. However, while most of the provinces continue to show some degree of plateauing after 2013, Southern Province seems to avoid this phenomenon by re-establishing a downwards trend towards zero. Beginning in 2011, Zambia launched a series of additional steps in Southern Province to generate evidence for ‘accelerating’ malaria transmission reduction. In addition to the standard package of interventions being deployed in all ten provinces, Southern Province received support to:

1. Deploy community health workers (CHWs) at a ratio of 1:850 and 1:750 in lower and higher transmission areas, respectively. (The national average at the time was greater than 1:1000 population.)
2. Establish capacity to perform both passive and reactive case detection and high-quality reporting in all communities.
3. Implement MDA in all eligible populations.

The complete package was deployed between late 2014 and 2016. Significant reductions in malaria burden in all districts within Southern Province were observed beginning in 2015. A parallel package is currently being implemented in Western Province in 'programmatic' mode; early indications point to benefits in Western Province mirroring those experienced in Southern Province.

The evidence emerging from the work in Southern and Western provinces provides Zambia with a foundation upon which to embark on the elimination path. The observations following the first booster action of 2005 indicated that the entire country responds to the deployment of efficacious interventions. This consequently becomes the basis for concluding that the use of additional interventions, while maintaining coverage with the ongoing intervention nationwide, will facilitate Zambia's progress over the next three years, as the country approaches zero transmission.

Figure 3: Annual malaria cases by province, 2001–2017.



Generated by MRC Centre for Outbreak Analysis and Modelling, Imperial College, London

8.3 Financing the addition of MDA combined with community case investigation to the existing interventions nationwide

For Zambia to attain malaria burden reduction to levels required to achieve elimination, it will be crucial to mobilise the resources necessary to close the gap in the

aforementioned analysis. Furthermore, as Zambia’s income classification is upgraded, external funding may be scaled down. The country will remain eligible for external funding, though the level of local counterpart financing will need to increase. Zambia must be prepared to increase national investments. This is not only a consequence of lower donor priority—indeed, as the elimination programme proceeds, costs will shift towards human resources, and, when the country is malaria-free, towards general health services. The Zambian government currently supports most of the human resources and general health services, and greater flexibility will be needed as the epidemiology changes. With such changes, government funding is likely to be more impactful. Therefore, national commitment—crucial for the achievement and maintenance of elimination—will be gauged by the extent to which domestic investments are increased, and this increase will be critical in leveraging ongoing donor support.

9. Priorities for the business plan

9.1 Community case investigation

In order to establish capacity for community case investigation, Zambia must deploy competent, equipped, and motivated community health workers (CHWs) at the ratio of approximately one CHW to 750 population in rural areas. It is estimated that Zambia will require nearly 15,000 practicing CHWs to achieve this ratio; currently, the country has 8,252 CHWs in the field. An additional 6,748 CHWs will need to be mobilised, trained, equipped, and deployed by the end of 2018. Zambia has the capacity to train and deploy this number within a period of 10–12 months, and there is currently adequate funding through the Global Fund grant to mobilise, equip, and deploy approximately 5,000 of these additional CHWs. Thus, the business plan must supplement this amount by finding the resources to mobilise and deploy an additional 1,748 CHWs.

The timing of this priority is critical, as it will enable implementation of MDA.

9.2 Community parasite clearance—MDA as an accelerator

Malaria mass drug administration is the treatment of the entire population in a geographic area with a curative dose of an antimalarial drug, without first testing for infection and regardless of the presence of symptoms. In Zambia, malaria MDA is typically conducted over two 10-day campaign rounds, with a 30-day break between the two rounds during the low-transmission period. Currently, the primary criterion to determine whether a health facility is eligible for malaria MDA is a malaria incidence rate of over 50 cases per 1,000 population per annum. MDA is an intervention that requires advanced planning, logistical management, and resource mobilisation in order to be effective. The funding gap for MDA over the next three years is estimated at USD 60 million; if this gap can be met (based on the most recent cost analysis conducted for implementing MDA in Zambia), the cost of delivery per person will be approximately USD 2.80. At this cost, it is estimated that close to 12 million individuals could be treated. Given this scenario, 95 eligible districts—with an average of 126,315 people per district—could potentially be reached with MDA during this period (2018–2020).

9.3 Larval source management

Larval source management (LSM) refers to the targeted management of mosquito breeding sites, with the objective of reducing the number of mosquito larvae and pupae. When used appropriately, LSM can help to reduce the numbers of both indoor and outdoor biting mosquitoes. Moreover, in a malaria elimination context, LSM can be a useful to complement the programme tools aimed at reducing the mosquito population in remaining malaria 'hotspots'. Where appropriate, LSM can also help programmes reduce their overall dependence on insecticides, thereby contributing to the prevention of insecticide resistance. Furthermore, LSM can help address hot spots where resurgence of malaria is reported. To meet the LSM activities in the three-year business plan, there is a gap of USD 7,896,176.

9.4 Cross-border initiatives

Limiting importation of malaria cases across borders through proactive regional collaboration and involvement of the mobile and migrant populations is envisaged as a central strategy for achieving and maintaining 100% malaria-free status following anticipated certification by 2021. A strong

national cross-border programme will contribute to reducing cross-border malaria transmission and the attainment of regional targets. The malaria burden measured as cases per 1,000 among countries of the E8 ranges between 0.23 and 371 (Elimination 8 Strategic Plan 2015–2020). The goal of eliminating the local transmission of malaria within the boundaries of these eight countries is an ambitious, but attainable target. Zambia's success in the context of elimination will be based on strategic coordination of the subnational level (districts, provinces) and ultimately the national level in collaboration with counterpart malaria programmes in the eight neighbouring countries.

The implementation of cross-border initiatives will contribute to harmonization of malaria elimination strategies among collaborating countries commonly referred to as Cross Border Malaria Initiatives (CBMIs), including: the Namibia-Zambia (NamZam) Cross Border Malaria Initiative established in 2014; the Zambia-Zimbabwe (ZamZim) Cross Border Malaria Initiative established in 2013; and a new cross-border initiative, Mazamo-mi, between Malawi, Mozambique, and Zambia, established in August 2012.

Given this backdrop, cross-border efforts will require the identification and establishment of new partners to ensure an uninterrupted flow of resources in order to attain the ambitious goal of elimination. Currently, the number of partners supporting CBMI activities is limited. Isdell:Flowers, the Global Fund, and SADC Elimination 8 have been supporting some aspects of CBMIs but gaps exist as the country plans to sustain and expand scope of the CBMI. There is a need for national malaria control programmes and their partners to prioritise CBMIs as one of the key components for malaria elimination. To successfully implement CBMI activities required in the three years of the business plan, a total amount of USD 1,622,135 will be needed to cover CBMI activities, namely joint annual review meetings, meetings for malaria focal persons in border districts, advocacy and health promotion activities, and implementation of joint/synchronised CBMI action plans including supervision/monitoring activities.

10. The resource mobilization strategies

In Zambia, the mining industries, Zambia sugar, faith-based organisations, and other groups have historically been active in malaria programmes, and their continued support at this

time will be critical. Resource mobilisation strategies for malaria elimination in Zambia will incorporate these potential partners, and leverage their contributions. Specifically, the following strategies will be used to maximise the impact of these partners:

1. Optimising the current resource envelope (President's Malaria Initiative, PATH Malaria Control and Elimination Partnership in Africa (MACEPA), Ministry of Health, Global Fund, etc.).
2. Expanding multi-sectorial (exploring smart investment) contributions from other ministries within the government (tourism, aviation industry, etc.).
3. Approaching philanthropist/social impact funds or grants (e.g., the Bill & Melinda Gates Foundation, Dangote, etc.).
4. Approaching the business community to prioritise malaria elimination within their Corporate Social Responsibility budgets.
5. Exploring public-private partnerships.
6. Optimizing the contributions of traditional leaders.
7. In kind or one off donations from new and non-traditional partners.

11. Governance

Implementation of this business plan will be overseen by the government.

12. Risk analysis

History has shown that the decision to pursue malaria elimination requires thoughtful consideration of its many challenges, risks, and benefits, and must include adequate planning for the prevention of reintroduction. Malaria elimination in Zambia is a reasonable goal at this juncture, as the alternative policy of reducing transmission to a level at which malaria is no longer a major public health threat would be untenable. Globally, under this scenario, there will be countries with effective malaria control, but which have pockets of malaria in primarily poor and marginalised populations; in other countries, national control programmes will struggle to keep malaria morbidity and mortality rates low. The remaining parasite reservoirs are then likely to become drug-resistant, and the local vectors may become insecticide-resistant. These enduring pockets will become sources of malaria, leading to the introduction of the disease into receptive, previously malaria-free regions. Consequently, malaria-free countries will need to remain vigilant and

employ costly response programmes to prevent the resurgence of drug-resistant parasites. Such a scenario will be expensive and unstable, and would be an unappealing public policy option for the 21st century.

This business plan serves as a pioneering model that shifts away from fragmented streams of official development assistance, towards an approach that combines mobilising domestic resources, attracting additional external resources, and improving efficiency in the use of resources. This plan employs innovative strategies for resource mobilisation and service delivery, including strong engagement with the private sector to maximise long-term, flexible, and predictable revenue streams for achieving elimination. Sustainable, donor-independent financing can be realised through multiple innovative approaches, including greater corporate-sector engagement, development of an endowment fund, and new taxation mechanisms. The development of such financing mechanisms will require close coordination between the government and the private sector, as well as transparent management.

The risk of high malaria transmission affects both Zambia and its neighbours; similarly, the benefits of elimination will be distributed across the greater region. When one country makes the investment to interrupt malaria transmission within its borders, it paves the way for its neighbours to do the same.

As Zambia works towards elimination, appropriate recognition and support for its efforts is crucial. This document seeks to initiate a process of evidence generation that will support and inform Zambia's efforts, and will draw attention to the financing gaps that must be filled in order to realise the vision of a malaria-free Zambia.