THE REPUBLIC OF UGANDA

GUIDELINES FOR MAINSTREAMING MALARIA IN THE MULTISECTORAL NATIONAL AND DISTRICT PLANS

Mass Action Against Malaria
A malaria free sector is my responsibility

February, 2020

UGANDA MULTISECTORAL ACTION FRAME WORK FOR MALARIA AND RESPONSE

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Contents

Acronymns

ACT	Artemisinin Combination Therapy
AIM	Action for Investment in Malaria
ALMA	African Leaders Malaria Alliance
CBOs	Community Based Organisations
COA	Chart of Accounts
CSOs	Civil Society Organisations
CDLS	Community Development Leaders
D.D.P	District's Development Plan
DFID	Department for International Development
EDPRS	Economic Development and Poverty Reduction Strategy
GTS	Global Technical Strategy
IRS	Insecticide Residual Spraying
IPT	Intermittent Presumptive Treatment
J A F	Joint Action Forum
LLIN	Long lasting Insecticidal Treated Nets
MAAM	Mass Action Against Malaria
MDAs	Ministries, Departments and Agencies
MFU	Malaria Free Uganda
MoH	Ministry of Health
OPM	Office of the Prime Minister
PRSP	Poverty Reduction Strategy Process
NGOs	Non-Government Organizations
NMCD	National Malaria Control Division
NEMA	National Environmental Management Authority
SDGs	Sustainable Development Goals
UMMAC	Uganda Malaria Multisectoral Action Committee
UMRSP	Uganda Malaria Reduction Strategic Plan
UPFM	Uganda Parliamentary forum for Malaria
WHO	World Health Organization

Glossary of Terminologies

Artemisinin-based combination therapy	A combination of an artemisinin derivative with a longer-acting antimalarial drug that has a different mode of action
Budget Call Circular	A financial instrument generated by the Ministry of Finance, Planning and Economic Development and sent to all budget centres including all accounting officers of government ministries, departments and agencies (MDAs). It communicates budget priorities, indicative sector ceilings and usually kick starts the process of the budget cycle,
Case management	Diagnosis, treatment, clinical care, counselling and follow-up of symptomatic malaria infections
Catchment area	A geographical area defined and served by a health programme or institution, such as a hospital or community health centre, which is delineated on the basis of population distribution, natural boundaries and accessibility by transport
Certification of malaria-free status	Certification granted by WHO after it has been proved beyond reasonable doubt that local human malaria transmission by Anopheles mosquitoes has been interrupted in an entire country for at least 3 consecutive years and a national surveillance system and a programme for the prevention of reintroduction are in place
Chart of Accounts	The Chart of Accounts for Uganda Government outlines and describes the codes that are used in financial management of the government Budget. The chart of accounts is a useful tool that ensure good budgeting and reporting practice hence budget discipline.
Combination therapy	A combination of two or more classes of antimalarial medicine with unrelated mechanisms of action
Coverage	A general term referring to the fraction of the population of a specific area that receives a particular intervention
Diagnosis	The process of establishing the cause of an illness (for example, a febrile episode), including both clinical assessment and diagnostic testing
Drug efficacy	Capacity of an antimalarial medicine to achieve the therapeutic objective when administered at a recommended dose, which is well tolerated and has minimal toxicity
Drug resistance	The ability of a parasite strain to survive and/or multiply despite the absorption of a medicine given in doses equal to or higher than those usually recommended. Note: Drug resistance arises as result of genetic changes (mutations or gene amplification) that confer reduced susceptibility
Endemic area	An area in which there is an ongoing, measurable incidence of malaria infection and mosquito-borne transmission over a succession of years

Endemicity	Degree of malaria transmission in an area. Note: Various terms have been used to designate levels of endemicity, but none is fully satisfactory. Parasite rate or spleen rate has been used to define levels of endemicity in children aged 2–9 years, i.e. hypoendemic: 0–10%; mesoendemic: 10–50%, hyperendemic: constantly > 50% and holoendemic: constantly ≥ 75% with a low adult spleen rate Parasite density decreases rapidly between 2 and 5 years of age.
Entomological inoculation rate	Number of infective bites received per person in a given unit of time, in a human population. **Note:** This rate is the product of the "human biting rate" (the number of bites per person per day by vector mosquitoes) and the sporozoite rate (proportion of vector mosquitoes that are infective). At low levels of transmission, the estimated entomological inoculation rate may not be reliable, and alternative methods should be considered for evaluating transmission risk.
Epidemic	Occurrence of a number of malaria cases highly in excess of that expected in a given place and time . Note: Seasonal increases in the incidence of malaria should not be confused with epidemics.
Fixed-dose combination	A combination in which two antimalarial medicines are formulated together in the same tablet, capsule, powder, suspension or granule
Focus, malaria	A defined. circumscribed area situated in a currently or formerly malarious area that contains the epidemiological and ecological factors necessary for malaria transmission. **Note:** Foci can be classified as endemic, residual active, residual non-active, cleared up, new potential, new active or pseudo.
Importation risk	Probability of influx of infected individuals and/or infective anopheline mosquitoes Note: Also referred to as "vulnerability"
Incidence, malaria	Number of newly diagnosed malaria cases during a defined period in a specified population
Incubation period	Period between inoculation of malaria parasites and onset of clinical symptoms Note: The shortest incubation period in mosquito-borne infections ranges from7 days for P. falciparum to 23 days for P. malariae malaria. The long incubation for P. vivax and P. ovale malaria (from 3 weeks to 1 year and exceptionally many years) is due to activation of hypnozoites. The incubation period may be shorter in blood-induced infections than in sporozoite-induced infections, depending on the size of the inoculum.
Indoor residual spraying (IRS):	Operational procedure and strategy for malaria vector control involving spraying interior surfaces of dwellings with a residual insecticide to kill or repel mosquitoes that rest on the walls
Insecticide, cross-resistance	Resistance to one insecticide by a mechanism that also confers resistance to another insecticide, even when the insect population has not been selected by exposure to the latter
Insecticide resistance	Property of mosquitoes to survive exposure to a standard dose of insecticide; may be the result of physiological or behavioural adaptation. **Note:** The emergence of insecticide resistance in a vector population is an evolutionary phenomenon due to either behavioural avoidance (e.g. exophily instead of endophily) or physiological factors whereby the insecticide is metabolized, not potentiated, or absorbed less than by susceptible mosquitoes.

Insecticide rotation	Strategy involving sequential applications of insecticides with different modes of action to delay or mitigate resistance
Integrated vector management	Rational decision-making for optimal use of resources for vector control **Note:** The aim is to improve the efficacy, cost-effectiveness, ecological soundness and sustainability of vector control activities against vector-borne diseases.
Intermittent preventive treatment in infants	A full therapeutic course of antimalarial medicine delivered to infants at the time of visits for routine immunization, regardless of whether the infant is infected with malaria
Intermittent preventive treatment in pregnancy	A full therapeutic course of antimalarial medicine given to pregnant women at routine prenatal visits, regardless of whether the woman is infected with malaria
Larval source management	Management of aquatic habitats (water bodies) that are potential habitats for mosquito larvae, in order to prevent completion of development of the immature stages. **Note:** The four types of larval source management are: habitat modification, which is a permanent alteration of the environment, e.g. land reclamation; habitat manipulation, which is a recurrent activity, e.g. flushing of streams; larviciding, which is regular application of biological or chemical insecticides to water bodies; and biological control, which consists of the introduction of natural predators into water bodies.
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Larvicide	Substance used to kill mosquito larvae **Note:** Larvicides are applied in the form of oils (to asphyxiate larvae and pupae), emulsions or small pellets or granules of inert carrier impregnated with insecticide, which is released gradually when they are placed in water.
Long Lasting Insecticidal Net (LLIN)	A factory-treated mosquito net made of material into which insecticide is incorporated. The net must retain its effective biological activity for at least 20 WHO standard washes under laboratory conditions and 3 years of recommended use under field conditions. **NOTE**: the only mosquito nets that has been recommended by government for public health use are Long lasting insecticidal nets.
Mass Action Against Malaria (MAAM)	An approach of involving everybody, public, private, community and household members in a participatory process so that malaria prevention and control interventions are scaled up and the malaria problem becoming everyone's business. **NOTE:** In order to roll out the MAAM approach, there is need to mainstream malaria so that all sectors and families become malaria smart
Malaria Mainstreaming	Incorporating anti-malaria activities in all sector development plans and budgets
Malaria Smart	The presence of malaria prevention and control activities in a sector, community or households. This includes practising correct anti-malaria prevention and control measures.

Malaria Prevalence (Parasite prevalence)	Proportion of a specified population with malaria infection at one time
Malaria incidence	Number of newly diagnosed malaria cases during a defined period in a specified population
Malaria Control	Reduction of disease incidence, prevalence, morbidity or mortality to a locally acceptable level as a result of deliberate efforts. Continued interventions are required to sustain control.
Malaria Free Uganda	This is a Private-Public Partnership initiative for mobilising resources and high level advocacy for malaria elimination in Uganda.
Malaria elimination	Interruption of local transmission (reduction to zero incidence) of a specified malaria parasite in a defined geographical area as a result of deliberate activities. Continued measures to prevent re-establishment of transmission are required.
Malaria eradication	Permanent reduction to zero of the worldwide incidence of infection caused by human malaria parasites as a result of deliberate activities. Interventions are no longer required once eradication has been achieved.
Malaria infection	Presence of Plasmodium parasites in blood or tissues, confirmed by diagnostic testing **Note:** Diagnostic testing could consist of microscopy, rapid diagnostic testing or nucleic acid-based amplification (e.g. polymerase chain reaction assays to detect parasite DNA or RNA).
Malaria mortality rate	Number of deaths from malaria per unit of population during a defined period
Malaria prevalence (parasite prevalence)	Proportion of a specified population with malaria infection at one time
Malaria risk stratification	Classification of geographical areas or localities according to factors that determine receptivity and vulnerability to malaria transmission
Malaria, cross-border	Malaria transmission associated with the movement of individuals or mosquitoes across borders
Malaria-free	Describes an area in which there is no continuing local mosquito-borne malaria transmission and the risk for acquiring malaria is limited to infection from introduced cases
Mass drug administration	Administration of antimalarial treatment to every member of a defined population or every person living in a defined geographical area (except those for whom the medicine is contraindicated) at approximately the same time and often at repeated intervals Note: Mass drug administration is usually performed in order to reduce the parasite reservoir of infection radically and thus reduce transmission in a population.
Mass screening	Population-wide assessment of risk factors for malaria infection to identify subgroups for further intervention, such as diagnostic testing, treatment or preventive services
Mass screening, testing and treatment	Screening of an entire population for risk factors, testing individuals at risk and treating those with a positive test result
Mass testing and treatment	Testing an entire population and treating individuals with a positive test result
Population at risk	Population living in a geographical area where locally acquired malaria cases have occurred in the past 3 years

Prequalification	Process to ensure that health products are safe, appropriate and meet stringent quality standards for international procurement **Note:** Health products are prequalified by an assessment of product dossiers, inspection of manufacturing and testing sites, quality control testing in the case of vaccines and medicines, validation of the performance of diagnostic tests and verification that the products are suitable for use in the destination countries.
Prophylaxis	Any method of protection from or prevention of disease; when applied to chemotherapy, it is commonly termed "chemoprophylaxis".
Rapid diagnostic test	Immuno-chromatographic lateral flow device for rapid detection of malaria parasite antigens
Residual Insecticide	Insecticide that exerts a toxic action on mosquitoes when they rest on a treated surface; the insecticide is absorbed via the tarsi (feet). **NOTE:** the country has been zoned to indicate areas which are targeted to benefit from IRS as per the country's malaria strategic plan
Repellent	Any substance that causes avoidance in mosquitoes, especially substances that deter them from settling on the skin of the host (topical repellent) or entering an area or room (area repellent, spatial repellent, excito-repellent)
Uncomplicated malaria	Symptomatic malaria parasitaemia without signs of severity or evidence of vital organ dysfunction **Note:** See current WHO definition (Guidelines for the treatment of malaria. Third edition). Malaria-associated disease can be defined more specifically by criteria for the degree of fever (e.g. temperature > 37.5 °C) and level of parasitaemia (e.g. > 5000 parasites/μL).
Vector	In malaria, adult females of any mosquito species in which Plasmodium undergoes its sexual cycle (whereby the mosquito is the definitive host of the parasite) to the infective sporozoite stage (completion of extrinsic development), ready for transmission when a vertebrate host is bitten. **Note:** Malaria vector species are usually implicated (incriminated) after field collection and dissection indicates that the salivary glands are infected with sporozoites; polymerase chain reaction assays can be used to detect and identify circumsporozoite protein, especially where infection rates are low.
Vector control	Measures of any kind against malaria-transmitting mosquitoes, intended to limit their ability to transmit the disease **Note:** Ideally, malaria vector control results in reduction of malaria transmission rates, by reducing the vectorial capacity, to a point at which transmission is interrupted.
Sector	A discrete part or sub-division of a larger whole; within societies, it refers to a group of activities with common social, economic, and political goals or dimensions.

Foreword

The Government of Uganda has registered progress in achieving set targets in the Uganda Malaria Reduction Strategic Plan (UMRSP 2014-2020). Despite this, implementation has stagnated as 14 Ugandans still die of Malaria every day. One of the major issues identified is inadequate funding especially from domestic sources. Findings from the budget analysis revealed that about 88% of the budget is dedicated to commodities and is donor funded. There is growing fear about the sustainability of the current interventions if donor support decreases. In response to this, the Ministry of Health in partnership with the Private sector and Rotarians has set up an initiative, Malaria Free Uganda (MFU), to raise Funds to supplement the envisaged funding shortfalls and sustain the malaria response going forwards.

In order to sustain and increase the above achievements, each Ministry, Department and Agency (MDA) should endeavour to become a Malaria Smart Sector by creating a malaria free working environment, and malaria smart operations. Accordingly, therefore MDAs are required to integrate and mainstream malaria control activities in their respective budgets.

In April 2018, His Excellency the President launched a Mass Action Against Malaria (MAAM) initiative where he committed to "a Malaria Free Uganda is my responsibility". As part of MAAM, all MDAs are called upon to take on responsibilities within their mandate for a Malaria Free Uganda by 2030.

The purpose of this guideline is to provide guidance to MDAs in mainstreaming of malaria control as a cross cutting issue in their plans and budgets in compliance with the Budget call Circular issued by the Permanent Secretary-Secretary to the Treasury (PSST) MoFPED starting with Financial Year 2020/21 budgets and over the medium term. In the same vein, would like to appeal to the Private sector, Rotarians, Philanthropists and Individuals to contribute to the Malaria Free Uganda fund. Together we can achieve a malaria free Uganda by 2030.

Rt. Honourable Dr.Ruhakana Rugunda
Prime Minister of Uganda

Preface

Malaria remains a priority among the national development agenda, through the multi-sectoral approach; all sectors are urged to contribute to the goal of ending Malaria as a public health threat by 2030.

These guidelines aim to help Government Ministries, Departments and Agencies (MDAs) and Local Governments (LGs), Development Cooperation Agencies, Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs), and the private sector to support the process of mainstreaming malaria into their routine programs; with the purpose of accelerating and improving a coordinated and harmonized national response to malaria.

Mainstreaming malaria in multisectoral plans has been considered as an appropriate and sustainable strategy to address its multifaceted drivers and consequences. This is rooted in the appreciation of malaria as a development issue requiring development related responses, and is articulated in a number of national and sectoral development instruments such as the vision 2040 and in the National Development Plan III.

Whereas Uganda has been making progress in mainstreaming Malaria; these efforts need to be strengthened and scaled up in all institutions. All institutions are therefore required to respond, within their mandates and spheres of influence to contribute to a malaria free Uganda. In this aspect, my ministry in partnership with Private sector and Rotarians have set up the Malaria Free Uganda initiative to provide high-level advocacy and mobilise resources for malaria elimination in Uganda by 2030.

I therefore call upon all the Government MDAs and LGs, our valued partners - the Development Cooperation Agencies, NGOs, CSOs, and the private sector to use this document as a reference tool or a resource for effective malaria mainstreaming of malaria in your respective activities.

Hon. Dr. Ruth Jane Aceng
Minister of Health

Acknowledgement

This guideline was developed by the National Malaria Control Division (NMCD), through a participatory process, in collaboration with the Multisectoral Partnership Department of the Ministry and with technical support from the World Health Organization.

We are very grateful for this initiative of integrating malaria across all sectors that was led by: Dr. Jimmy Opigo, Assistant Commissioner for Health services; supported by NMCD staff, Mr.Peter Kwehangana Mbabazi, Dr.Catherine Maiteki-Sebuguzi, and Dr. Daniel Kyabayinze; and with technical assistance from WHO officers, Dr.Bayo Fatunmbi and Dr. Charles Katureebe.

We wish to express our sincere gratitude to all the officials of the Uganda Roll Back Malaria (RBM) Partnership who participated in the different stages of the guideline development and review.

The development of these guidelines was made possible by the financial support of World Health Organisation. This guidance is critical towards strengthening and streamlining efforts by all Malaria multisectoral partners in sustainable malaria financing.

Dr. Diana Atwine
Permanent Secretary
Ministry of Health

1.0INTRODUCTION

1.1 Overview

In Uganda, Malaria has remained a leading cause of ill health and death and imposes a heavy socio-economic burden on families and the nation at large; costing a family on average 9 USD or 3% of its annual income per episode[1]. It is therefore paramount that malaria is mainstreamed in all sectors if the country is to control and mitigate its impact on the economy. The involvement of all sectors in the implementation of the malaria control and elimination strategies is a key requirement to achieving the vision of a Malaria Free Uganda by 2030.

The Ministry of Health through the NMCD has recommended use of Mass Action Against Malaria (MAAM) initiative where malaria control is a collective effort for everyone at all levels including at the households[1]. This initiative will be implemented using a multi-sectoral approach involving relevant actors; government line ministries, agencies, parastatals and the private sector.

The Ministry of Health, with technical assistance from WHO and in collaboration with the Roll Back Malaria Partnership to End Malaria developed the guidelines to mainstream malaria in multi-sectoral plans at the national and sub national level. The mainstreaming of malaria in sectoral plans will facilitate the harnessing of the full potential of all sectors towards malaria control and elimination. This guideline will provide clarity to Ministries, Departments and Agencies (MDAs)about the country's malaria situation, their impact on malaria transmission and their possible contribution towards a malaria free Uganda.

1.2 Malaria situation

Malaria is the leading cause of ill health and death in Uganda. The entire population of about 41 million is at risk of malaria and the disease accounts for 30-50% of outpatient consultations[2] and costs a family on average US dollars 9 or 3% of annual household income per episode. Globally Uganda is the 3rdhighest contributor of malaria cases and 7th highest contributor of malaria deaths according to the World Malaria Report (WMR) 2019[3]. Malaria has a significant negative impact on the economy of Uganda due to loss of workdays because of sickness, decreased productivity, decreased school attendance and poor overall school performance, and loss of foreign direct investment.

A number of environmental factors determine the distribution, seasonality and transmission intensity of malaria, including:

1. Abundance of surface water, its chemical composition, pollution and vegetation, which determines the proliferation and density of the vector;
2. The atmospheric humidity and temperature, determining the longevity of the vector and the ability of the parasites to develop; and
3. The preference for human or animal blood, the form of human aggregation and the type of shelter, which determine the contact between the vector and humans.

Over the past decade, significant gains have been made in malaria burden reduction in Uganda[4] as follows: Parasite prevalence dropped by 80% from 42% in 2009 to 9% in 2019; Mortality reducing from 20 per 100,000 population in 2016 to 9 per 100,000 population in 2019; and Incidence of total malaria cases declined from 460 per 1000 population in 2013 to 281 in 2019[5]. However, these gains fell short of the 2020 targets. Malaria transmission in the country has become more heterogeneous with prevalence varying from less than 1% is the Kampala and Kigezi regions to 34% in the Karamoja region.

1.3 Impact of malaria

Beyond direct burden on health status, there is the indirect, socio-economic component which includes out-of-pocket expenditure for consultation fees, drugs, transport and subsistence at a distant health facility. In addition, sickness results in loss of workdays hence decreased productivity and decreased school attendance leading to poor performance.

Malaria accounts for thirty-seven percent (37%) of workforce illnesses and absence from the production value chains. As such, investments in reducing malaria will contribute significantly to increasing productivity of Uganda's population, and hence, increasing GDP. It is estimated that an increase in malaria morbidity by one unit, while holding all other factors constant, results in a per capita GDP decreases by US$ 0.00767 per year[1]. One of the major weaknesses revealed in the evaluation of Uganda's first Poverty Reduction Strategy Process(PRSP)[6]was that malaria actions were segregated in the health sector resulting in failure to address the cross-cutting impact the epidemic has on all sectors; and impeding the PRSP's goal of economic development and poverty reduction.

In the Economic Development and Poverty Reduction Strategy (EDPRS)[6], malaria is addressed as a cross-cutting issue in all 12 sectors. As such, a multi-sectoral approach is a prerequisite to achieve the overall objective of malaria control and elimination. Under the leadership of the Uganda Malaria Multi-sectoral Action Committee (UMMAC), in collaboration with different partners and civil society, each sector must contribute to the malaria response through the implementation of sector-appropriate malaria programmes and activities. Uganda utilizes the decentralization system with programs and activities implemented at the sub national level. The District Local Governments reserve the right to plan, implement and monitor activities for their development.

1.4 Multisectoral action for malaria

To ensure effective multi-sectoral malaria response there is need for the following:

- Standardization and guidance for the implementation of malaria control and prevention in all sectors
- Integration of malaria in sector plans and budgets
- Appropriate resource allocation and accountability for malaria
- Adequate capacity at all levels of response
- Good governance and leadership for malaria in all sectors
- Effective coordination mechanism

Systematic mainstreaming of malaria in sectors will facilitate implementation, monitoring and evaluation of the sector malaria responses and the overall contribution to the national strategy.

There is need for clarity and to have a common understanding of what malaria mainstreaming entails, and thus a need for the current guidelines in the light of the current direction in the national response towards a malaria free Uganda through a multisectoral approach. In the 2019/20 Budget Call Circular, the Ministry of Finance, Planning and Economic Development instructed MDAs and Local Governments to provide for malaria mainstreaming budget in their Mid-Term Expenditure Framework (MTEF) allocation. These guidelines, therefore, provide a step-by-step process of how to mainstream malaria in all sectors plans and budgets.

The MOH is implementing the Mass Action Against Malaria (MAAM)operational guidelines[7] through a multi-sectoral approach involving all relevant actors. The Multi-sector includes; MDAs, LGs, Development Cooperation Agencies, NGOs, CSOs, and the private sector. The objectives of the multi-sectoral action for malaria[1]include to:

1. Develop the capacity, mechanisms and mandates of national and relevant local authorities to encourage ambitious national responses to achieve the Malaria-related targets included in the Sustainable Development Goals (SDGs);
2. Strengthen governance and regulatory frameworks for strengthening community action, civil society networks, social movements as well as collaboration between civil society, government, development partners, and the private sector to implement national Malaria responses; and
3. Ensure strong governance and regulatory frameworks in areas where it is a prerequisite for:
    a. Mobilizing adequate, predictable and sustained resources for the malaria response from domestic public resources, domestic and international private business and finance, and international development cooperation, including voluntary innovative financing mechanisms;
    b. Protecting the development of national Malaria policies from undue influence by any real, perceived or potential conflict of interest, including the fundamental conflict of interest between the extraction industry and public health;
    c. Ensuring mutual accountability of different spheres of policy-making that have a bearing on Malaria
4. Fast track the implementation of malaria interventions, address key determinants of malaria and attainment of the malaria related targets within the Health sector strategic plan.

1.5 National commitments and malaria response

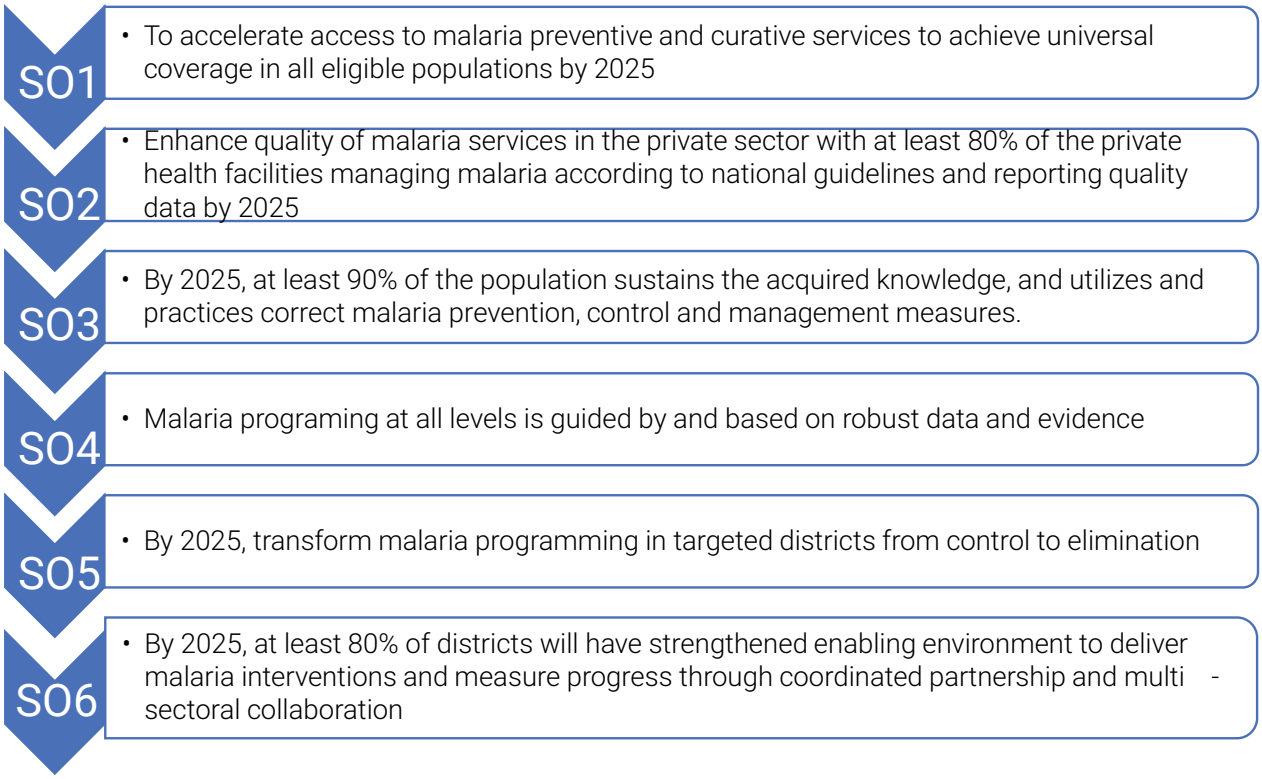
Malaria is a priority within the national health agenda of Uganda. The National eHealth Policy II[8] and the Health Sector Development Plan II[9] position malaria among the diseases targeted for elimination while the National Development Plan III[10] provides for a special focus on malaria under national Objective 3, specific action 1 covering malaria: “Prevent and control Non-Communicable Diseases and Communicable Diseases with focus on high burden diseases (Malaria, HIV/AIDS, TB) and epidemic prone diseases.

The Ministry of Health through its Uganda Malaria Reduction and Elimination Strategic Plan 2021 – 2025 (UMERP)[11]with a vision of: “A Malaria-free Uganda” to enable socio-economic transformation in alignment with Uganda Vision 2040, provides a common framework for the government, its development partners, the private sector and all stakeholders to accelerate nationwide scale up of evidenced based malaria reduction and elimination interventions. In addition, malaria activities are integrated into the Economic Development and Poverty Reduction Strategy (EDPRS). The implementation of this strategy is the responsibility of the MDAs and districts.

The goal of the2021-2025Uganda Malaria Reduction and Elimination Strategic Plan is to reduce malaria morbidity by 50% and malaria related mortality by 75% of the 2019 levels by 2025. The strategic objectives are as shown in figure 1:

1 MOH Uganda (2020): Multi sectoral Action Plan for Malaria

Figure 1: Strategic Objectives of the Uganda Malaria Reduction and Elimination Strategy 2021-2025



All districts have local development plans called District Development Plan(DDP) that contribute to achievement of the EDPRS objectives. During planning, the Joint Action Forum (JAF) through a participatory approach agrees on district priorities, activities, and funding sources. In addition, an annual work plan, that also serves as a resource mobilisation tool is developed.

Key interventions by Strategic Objective:

The malaria strategic plan spells out the main malaria interventions and serves as a guiding document for the programme implementation. Malaria control interventions fall into broad categories of: Prevention, case management, social Behavior Communication, Programme Management, Surveillance, Monitoring, Evaluation and Operations Research, and Epidemic prevention, preparedness and response. As the country moves along the elimination continuum the intensity and delivery mode of these interventions will vary. In addition, specific actions will need to be taken to accelerate the countries progress towards elimination. This section spells out some of these interventions.

SO1: To accelerate access to malaria preventive and curative services to achieve universal coverage in all eligible populations by 2025

- **Strategy 1.1:** At least 90% of the population at risk are protected through appropriate vector control and chemo prevention measures;
- **Strategy 1.2:** Improve and sustain parasite-based diagnosis;
- **Strategy 1.3:** At least 90% of malaria cases are appropriately managed in public and private facilities and at the community level;
- **Strategy 1.4:** At least 85% of all pregnant women are protected with quality malaria prevention interventions

SO2: Enhance quality of malaria services in the private sector with at least 80% of the private health facilities managing malaria according to national guidelines and reporting quality data by 2025.

- **Strategy 2.1:** Establishment of malaria private sector coordination mechanism at the NMCD;
- **Strategy 2.2:** Strengthening the capacity of the private sector to deliver quality malaria preventive and curative services;
- **Strategy 2.3:** Strengthening the quality of services at the private sector through private sector facility accreditation and regulatory environment including reporting;
- **Strategy 2.4:** Ensure sustainable financing of affordable malaria interventions at workplaces & institutions.

SO3: By 2025, at least 90% of the population sustains the acquired knowledge, and utilizes and practices correct malaria prevention, control and management measures.

- **Strategy 3.1:** Create demand for preventive and curative services/products through increased population knowledge and adherence to positive malaria practices;
- **Strategy 3.2:** Raise the profile of malaria amongst policy/decision makers and actors at all levels;
- **Strategy 3.3:** Strengthen structures and mechanisms for the delivery of malaria SBCC interventions and full operationalization of the MAAM approach;
- **Strategy 3.4:** Strengthen community-based behavioural change actions to harness and sustain positive malaria practices.

SO4. Malaria programing at all levels is guided by and based on robust data and evidence

- **Strategy 4.1:** Develop a malaria surveillance framework to guide decision making at all levels;
- **Strategy 4.2:** Strengthen HMIS data collection, quality, and use at facility and community levels;
- **Strategy 4.3:** Establishment of a National Data Repository for malaria;
- **Strategy 4.4:** Strengthen Surveillance for Vector Bionomics, Insecticide and Drug Resistance;
- **Strategy 4.5:** Support learning, adaptation, innovation, best practices and operational research;
- **Strategy 4.6:** Conduct periodic evaluations and reviews;
- **Strategy 4.7:** Strengthen malaria Epidemic Prevention, Preparedness and Response at all levels.

SO5: By 2025, transform malaria programming in targeted districts from control to elimination

- **Strategy 5.1:** Assess malaria elimination readiness;
- **Strategy 5.2:** Resource mobilization for elimination readiness;
- **Strategy 5.3:** Capacity building, design and implementation of sustainable interventions at the district level;
- **Strategy 5.4:** Transform the surveillance system from routine to case-based surveillance.

SO6: By 2025, at least 80% of districts will have strengthened enabling environment to deliver malaria interventions and measure progress through coordinated partnership and multi-sectoral collaboration.

- **Strategy 6.1:** Strengthen human resource capacity for malaria programming at all levels (National, sub-national, Private sector and Community);
- **Strategy 6.2:** Improve governance and stewardship for malaria programming;
- **Strategy 6.3:** Ensure multi-sectoral partnerships and collaboration for malaria response;
- **Strategy 6.4:** Mobilise resources for the malaria programme;
- **Strategy 6.5:** Ensure malaria commodity security at all levels;
- **Strategy 6.6:** Enhance an efficient and effective malaria service delivery system at all levels (national, district and community); and
- **Strategy 6.7:** Strengthen institutional capacity through WHO's transfer of technical support skills for integrated malaria control and elimination.

Malaria transmission can be suppressed by effective malaria control measures. However, a breakdown of malaria programme results into resurgence of malaria, outbreaks, and epidemics. A review of 75 resurgences in 61 countries between 1930 and 2000 showed that 68 out of the 75 (91%) of the resurgences were attributed at least in part to weakening of malaria control programmes[12] Of these 37 out of the 68 (54%) were due to funding shortages[12].

Given the potential severity of resurgence, engaging in but not continuing funding of conventional malaria control programmes may raise ethical concerns. Looking into the future from a vantage point of a multisectoral approach to malaria that, in addition to the conventional malaria control strategies has added a development dimension, there are three main streams of financing in question:

1. Financing for conventional malaria interventions (Long lasting Insecticidal Nets, Indoor Residual Spraying, Malaria in Pregnancy, and Case Management)
2. Financing of coordination and capacity building of sectoral actors to be more malaria-smart in what they would already do to deliver on the sustainable development goals;
3. Financing of malaria intervention costs incurred directly by the household and the individual (costs of conventional interventions, housing improvement, and adoption of other malaria smart practices).

The total cost of implementing the Uganda Malaria Reduction Strategic Plan 2014-2020 was budgeted at 3 billion USD. However, only sixty seven percent (67%) of this budget was realized, indicating a budget short fall of approximately 33% or USD 1 billion[1].It is anticipated that this financing gap can be addressed through adequate operationalization of the multi-sectoral approach.

1.6 Justification

Despite Uganda's tremendous progress in malaria burden reduction, the programme fell short of achieving the targets set in the previous strategic plan – UMRSP 2014-2020 (MTR 2017, MPR 2019). One of the key recommendations was the urgent need for the NMCD to develop and implement a plan using a Mass Action Against Malaria approach where malaria prevention and control will, be everybody's responsibility.

In 2018, the MAAM initiative was born and later a Uganda Multi-sectoral Action Framework articulated to guide and initiate multi-sectoral engagement by outlining how and what the different sectors should do either working together or individually in a harmonized way to effectively implement malaria reduction activities in their programs and institutions. The Framework elaborates on the link between the different sectors and malaria, proposes priority factors to be addressed by different sectors and highlights key actions to be taken.

In the 2019/20 Budget Call Circular[13], the Ministry of Finance, Planning and Economic Development instructed MDAs and Local Governments to provide for malaria mainstreaming budget in their Mid-Term Expenditure Framework (MTEF) allocation.

It is evident that the Ministry of Health, given all the needed resources, cannot alone, prevent and eliminate malaria. Hence the need to leverage on the available opportunities and expertise in other key stakeholders including the other health related sectors.

These guidelines therefore provide a step-by-step process of how to mainstream malaria in all sectors plans and budgets. It outlines: malaria control commitments to be made by each sector; key actions to be taken; and potential challenges and mitigation measures in the process of integrating malaria in EDPRS. It also shows at the implementation level the link between the EDPRS, the DDP's and the district's annual work plans.

2.0 GUIDE TO MAINSTREAMING MALARIA IN SECTORS

Developing ambitious national responses to the Malaria related targets included in the Sustainable Development Goals (SDGs) will require action across all MDAs, Local Governments, and institutions, as well as the engagement of civil society and private sector. Engagement of other sectors is critical for delivering the national commitments such as:

- Setting national targets for malaria;
- Incorporating malaria into the national development agenda and plans;
- Implementing health of which malaria is among in all multi-sectoral policies, plans and society approaches; and
- Raising public awareness about the public health burden caused by malaria and the relationship between Malaria, poverty and social and economic development.

2.1 Purpose of the guideline

The purpose of this guideline is to provide guidance to MDAs in the implementation of the MAAM initiative in compliance with the 2020/2021 Budget call Circular issued by the PSST MoFPED calling for planning for malaria control as a cross cutting issue starting from FY 2020/21 budgets and over the medium term.

2.2 Goal and Objectives

Goal: To engage the various sectors and mainstream malaria control and elimination interventions into their action plans and become a malaria SMART sector.

Objectives: The guidelines will empower and ensure that all sectors have:

1) A clear understanding of relevant malaria control interventions
2) A well described step-by-step process of mainstreaming malaria interventions in sectoral and institutional plans
3) The relevant capacity to plan, implement and monitor malaria control interventions in all sectors and institutions

2.3 Target Audience

These guidelines shall be utilized primarily by the following officials in MDAs, Local Governments and relevant institutions as listed in Annex 1 Sectors and Agencies;

i. Policy makers
ii. Permanent Secretaries and Accounting Officers and other officers (including CAOS, Departments, Town Clerks etc.)
iii. Planners and Heads of Departments
iv. Malaria Focal Points

v. Decision Makers and Managers

vi. MDAs, LG and institutional staff

vii. Regional Referral Hospitals

viii. National Malaria Control Division

ix. Roll Back Malaria partners (including UN, Bi- & Multilaterals, NGOs, CSOs, CBOs, Research/ Academia)

x. Parliamentarians

xi. Mayors

xii. Private Sector CEOs

2.4 Guiding Principles

The guiding principles for successful multi-sectoral engagement as set out in the multi-sectoral action framework will apply to the process of mainstreaming malaria in all sectors. These include the following:

1. Inclusiveness of other sectors with influence, comparative advantage and expertise to prevent and control malaria and accelerate malaria free Uganda. Health sector alone cannot actualize the goal of malaria free Uganda.
2. Effective leadership to facilitate successful policy development, strategic planning, resource mobilization, sector collaboration, implementation, co-ordination, and monitoring & evaluation.
3. Transparency to ensure all information on the rational and process of decision making and implementation is accessible
4. Diversity to ensure to ensure the right balance of skills and capacity is established to take forward the prioritized actions.
5. Evidence-based decision making to ensure that malaria interventions are based on rigorous research and field application and best practices and lessons learned are applied for improvement
6. Accountability for implementation to ensure that planned actions and results will be documented and reported back to the leadership

2.5. Steps to becoming a 'malaria smart sector'

A sector is a discrete part or sub-division of a larger whole; within societies, it refers to a group of activities with common social, economic, and political goals or dimensions

A malaria smart sector is one that is convinced of its responsibility in the national malaria response. As such, it plans, budgets and implements malaria control and prevention activities, and is able to monitor and evaluate its performance in contributing to the national response.

Limited engagement of other sectors and actors in malaria control leads to its low prioritisation, missed opportunities, fragile gains and a resultant low or no, and possible reversal of progress towards national targets. To facilitate the process of mainstreaming malaria, other sectors and actors at national and sub national level shall follow the steps below as a guide.

Step 1: Advocacy and Sensitization
Making necessary contact with relevant stakeholders within and outside the sector. Selling the idea of MAAM initiative and the need for multisectoral engagement based on comparative advantage and value-adding. Making others see how malaria affects them (individuals, families, communities and sectors) and how can contribute to malaria response towards a malaria free Uganda.

Step 2: Establish Malaria Coordination Committee
The MDA/ LG/ Institution should establish and support the function of a Malaria coordination committee with in its senior management leadership structure. The Accounting Officer/ Chief Executive of the institution shall chair the committee and appoint members representing departments/units to the committee. The committee should have clear terms of reference, a secretary/ Malaria Focal Person who will be responsible for day-to-day planning, coordination and implementation of the malaria activities in the sector/institution.

Step 3: Develop / Update context specific malaria action plan
Each sector should develop a context specific malaria action plan that is aligned to the Malaria Strategic Plan. The plan should be an integral part of the MDA/LG/institution plan, to facilitate this, as part of the planning process, the following should be analysed:

i. **Sectoral Situation Analysis**
Review of Operations in relation to malaria:
Ways of operation, practices, procedures and production systems to identify those that are potentially contributing to sustaining or increasing malaria or hindering progress in malaria prevention. The sector should then develop and promote the use of approaches that do not produce malaria. Review of current activities to identify those that could be modified or added to have a malaria-reducing effect. Each sector will have some comparative advantages with respect to malaria control that can be released with no or limited additional costs.

ii. **Identify Entry points for mainstreaming malaria interventions**
The sector should review its potential and role in addressing determinants of malaria where concerted efforts by multiple sectors are required. It should then actively engage nationally and locally in addressing the priority determinants, including through establishing Memorandums of Agreements, defining indicators and setting and reporting on targets. See Annex 2 for key entry points, actions and outcomes for each sector.

iii. **Develop institutional capacity to implement interventions**
Assessment of capacity to implement malaria commitments and identify required capacity building actions to include in the plan.

iv. **Financial resource for malaria**
The plan should be costed and have a comprehensive Relevant resources should be mobilized to develop the needed capacities.

Develop the Monitoring & Evaluation framework
v. To monitor and assess progress towards achieving its stated goal and objectives.

Step 4: Initiate incorporating Malaria Strategies into Sectoral Policy and Strategies
Malaria shall be incorporated into existing policies to mitigate negative impacts of activities, achieve synergies in addressing low hanging fruit, and prevent missed opportunities for malaria prevention and control. Each sector/actor shall initiate the process through identifying and developing policies that are malaria smart. In addition, at the appropriate time, they shall review policies, approaches and practices to identify those that are potentially contributing to sustaining or increasing malaria

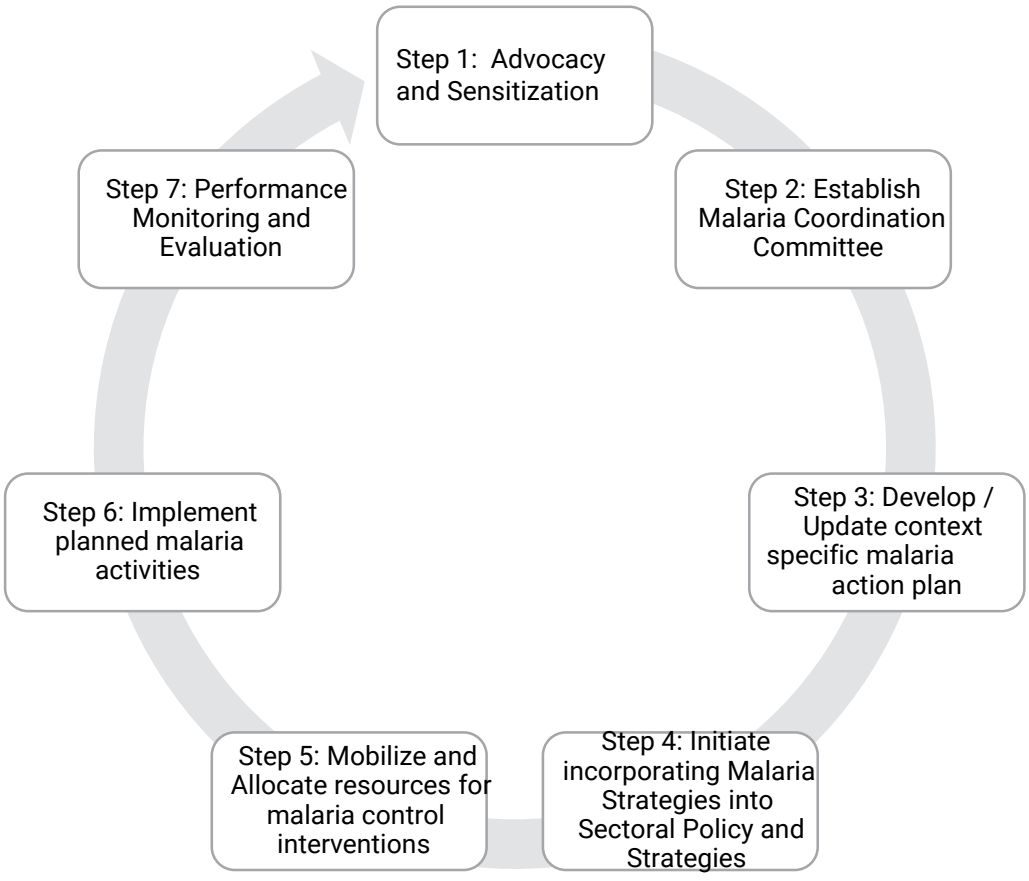
transmission or insecticide and drug resistance and make revisions as required.

Policies that may have a bearing on malaria include, Work place malaria policy, Health Insurance policy, Public awareness and education policy, Policy on construction standards, policy on sanitation, policy on community participation or involvement, policy on management of public health pesticides amongst others.

Step 5: Mobilize and Allocate resources for malaria control interventions
Each sector shall allocate a proportion of its resources to malaria programs as per the budget call circular to fund its malaria action plan. The sector should also mobilize additional resources (internal and external) to cover any funding gaps. The ultimate goal will be to reduce resource requirement for malaria by making malaria interventions part and parcel of routine functions, activities and budgets.

Step 6: Implement planned malaria activities
Each sector should conduct, document, and report on the planned activities on a quarterly basis. The sector shall define the roles and responsibilities of all relevant stakeholders, mobilize and engage relevant partners, build capacity and skills to ensure effective implementation. To promote accountability among sectors and actors, a National Common Performance Assessment Framework (NCPAF) for malaria will be developed. The development process will be participatory process involving all Malaria stakeholders and will outline key public policy actions to achieve the EDPRS Malaria outcome priorities over the next 5 years.

Step 7: Performance Monitoring and Evaluation: The implementation of these guidelines will be monitored and performance evaluated based on the stated goal and objectives. The monitoring and evaluation section identifies the parameters to be measures as well as the mechanism to measure them.



2.6 Expected results

Mainstreaming malaria in the sectors has key results that are beneficial to malaria programming and the economy at large including:

i) Increased awareness, knowledge on malaria and demand for malaria interventions among the workforce and the community

ii) Improved Institutional response to malaria in all sectors through well-resourced malaria plans that are monitored and evaluated

iii) Improved institutional capacity to implement and monitor malaria interventions in all sectors

2.7 Priority interventions for sectoral malaria mainstreaming

The UMESP 2021-2025 specifies strategies, interventions, and actions to be taken to achieve a malaria free Uganda. Key interventions as derived from the UMESP that shall be undertaken by the MDAs, LGs, institutions, CSOs, and Private sector in mainstreaming malaria are listed in this section. The priority actions for each sector are specified in the Uganda Malaria Multisectoral Action Framework section 2.8 pages 30-39.

1. **Malaria Prevention Interventions**
   - Conduct malaria prevention sensitization for staff, clients, and community
   - Promote and where possible provide subsidized or free access to malaria prevention interventions including LLINs or IRS to staff, families and clients, where possible
   - Regular review of sector activities to identify those that could be modified or added to have a malaria-reducing effect
   - Regular review of sector operation, practices, procedures and production systems to identify those that are potentially contributing to sustaining or increasing vector load, parasite transmission or insecticide and drug resistance. Develop and promote the use of approaches that do not produce malaria
   - Identify, design and implement/participate in corporate social responsibility activities that have a positive bearing on malaria prevention and control e.g Environmental management, LLIN distribution; Mass media campaigns etc

2. **Support prompt and effective treatment**
   - Support all staff access timely diagnosis and malaria treatment through fair health policies
   - Support all staff and families to access health care through health / medical insurance, if possible
   - Advocate insurance companies to provide malaria friendly coverage schemes for staff and clients

3. **Support systems strengthening**
   - Develop and operationalize malaria workplace policies
   - Integrate malaria action plans in existing sector plans
   - Support and integrate malaria coordination in existing leadership structures

- Integrate malaria in existing coordination meetings to review progress and planning of activities
- Conduct resource mobilization activities to ensure implementation of sector malaria action plans including ensuring appropriate allocation of sector funds for malaria control
- Identify areas of collaborate with other sectors for malaria control
- Capacity building

4. **Human Rights and Equity Barriers to access and utilization of malaria Services**
   Marginalized populations including; vulnerable and underserved populations, such as children under five years and pregnant women, adolescents, people living with HIV, people with disabilities, inmates and other detainees, people in closed/congregate settings, migrant and mobile populations, internally displaced populations, refugees and asylum seekers, older persons and people affected by ethnic, geographical or cultural barriers, that are prevented from participating in malaria prevention, treatment and control programmes due to economic and social barriers are at an increased risk of malaria infection, severe disease, and poor health outcomes.

   During mainstreaming of the malaria response, inequities should be addressed by focusing on the following:

   1. Reducing gender and age-related stigma and discrimination and harmful gender norms for improved uptake and retention on malaria prevention and treatment services;
   2. Promoting meaningful participation of affected populations in malaria programmes;
   3. Strengthening community systems for participation in malaria programmes;
   4. Advocating for the strengthening of malaria services in prisons, places of detention such as holding cells in courts and police, health and education institutions;
   5. Improving access to malaria services for underserved populations including refugees, asylum seekers and other displaced populations;
   6. Developing or activating existing feedback mechanisms to enable health facility clients voice their health rights concerns,
   7. Strengthening and sustaining the capacity to understand and apply the principles of human rights informed, gender sensitive public health responses at all stages of the development of laws, regulation and policies in the context of malaria, and
   8. Disaggregating health data by age and sex and carrying out gender and age analysis on the results in order to inform interventions.

2.8 Tracking Multisectoral resource allocation & utilisation for Malaria control outcomes

Sustaining achievements in malaria control and making progress toward malaria elimination requires a multi-sectoral approach with all sectors contributing to the goal of ending Malaria as a public health threat. To ensure all sectors contribute to end malaria, calls for a coordinated approach to mainstream malaria in multisectoral plans as one of the appropriate and sustainable strategy to address its multifaceted drivers and consequences. This is primed on the fact that malaria is a development issue that requires development related approaches and responses to eliminate it. The development response to end malaria is well articulated in several national and sectoral development tools that include the vision 2040 and in the National Development Plan III.

The President launched a Mass Action Against Malaria (MAAM) initiative where he committed to a Malaria Free Uganda by 2030. As part of MAAM, all Ministries, Departments and Government Agencies are supposed to mainstream malaria control, as a cross cutting issue, as part of the planning and budgeting process to ensure compliance with the Budget call Circular issued by the Permanent Secretary-Secretary to the Treasury (PSST) Ministry of Finance Planning and Economic Development (MoFPED) starting with Financial Year 2020/21 budgets and over the medium term.

The Government of Uganda developed a Multi-sectoral Action Framework to provide guidance on how the different sectors are expected to respond in a harmonized approach to effectively implement malaria reduction activities in their programs and institutions. The Framework elaborate the link between the different sectors and malaria, proposes priority issues to be addressed by the different sectors and the expected actions to be taken. In the 2019/20 Budget Call Circular, the MoFPED instructed MDAs and Local Governments to provide for malaria mainstreaming budget in their Mid-Term Expenditure Framework (MTEF) allocation.

As part of ensuring MDAs and Local Governments are incompliant with the Budget call Circular issued by the MoFPED, and which was to come into effect in Financial Year 2020/21, the Ministry of Health (MoH) calls upon the PSST to consider introducing a budget tracking system to track MDAs and local government mainstreaming efforts in their budget as part of their commitment to elimination of malaria. This will entail introduction of a line item under the Uganda Chart of Accounts (COA) to cater for budget allocation by MDAs and Local Government to implement malaria activities and link the line item to expected outputs. This will facilitate tracking of resource allocation and spending on malaria mainstreaming activities by different MDAs and Local Governments under the MAAM initiatives.

2.9 Mechanisms for coordination and accountability:

The sectoral action on malaria in Uganda is based on five principles: inclusiveness; effective leadership; transparency; diversity; and evidence-based decision-making. The onuses for coordination and accountability in districts are the elected constitutional government structures: Local council V (district level) and Local council III (sub-county level). Each sector must mainstream malaria into their Economic Development and Poverty Reduction Strategies (EDPRS): security; works and transport; agriculture; education; health; water and environment; justice / law and order; energy and mineral development; tourism, trade, and industry; lands, housing, and urban development; and social development. The different sectoral elements are then integrated into the District Development Plan (DDP) by the Local government with support of the National Malaria Control Division/ MoH.

Cross-sectoral accountability: in addition to indicators for input, process, output and outcome, accountability for malaria and co-benefit impact is exercised through assessing the following parameters: reduced malaria burden; reduced burden on the health sector, intervention coverage by sectoral contributions; reduced school absenteeism; improved productivity; and increase per capita income. In addition, two indicators for each of the 17 SDGs are specifically monitored in relation to malaria.

Accountability to the public / community: the Local councils III comprise members representing each parish whose members are selected by villages and communities. The Local councils III are in turn represented in the Local councils V. In this way accountability works both up and down.

3.0 MONITORING AND EVALUATION

The implementation of these guidelines will be monitored and performance evaluated based on the stated goal and objectives. The monitoring and evaluation section identifies the parameters to be measures as well as the mechanism to measure them.

M&E Parameters – what to measure:
This relates to what parameters of interest are to be measured. The monitoring category includes: inputs (resources needed), process (implementation activities / tasks), outputs (tangible deliverables), while the evaluation category has outcome (short term benefits/effects) and impact (long term benefits / effects). Examples of parameters to be measured are shown in Figure 1Monitoring and evaluation parameters below.

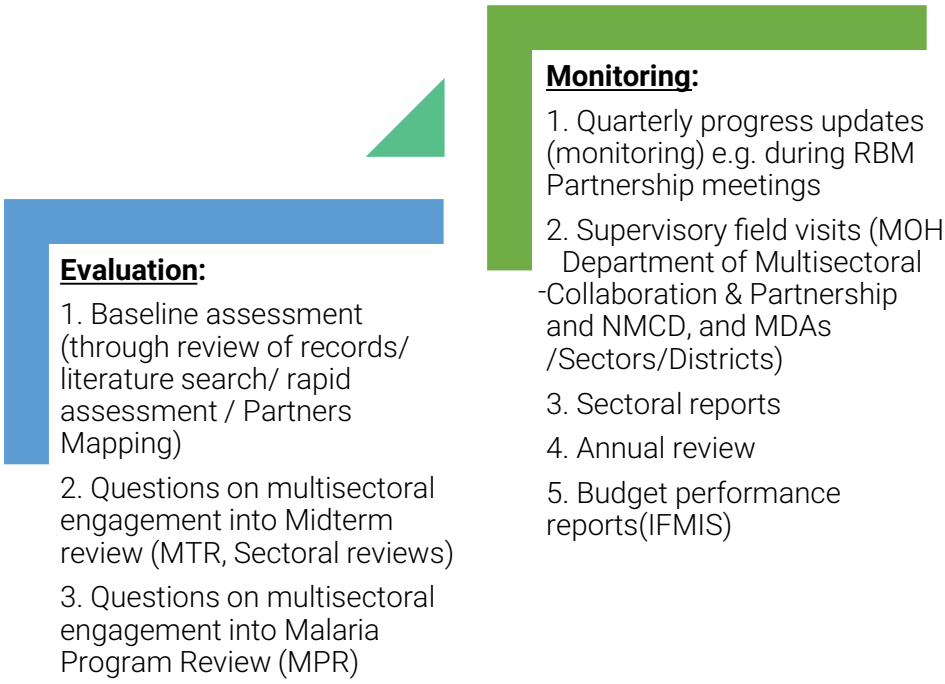
Figure 1: Monitoring and Evaluation Parameters

Inputs	Process	Output	Outcome	Impact
• Guidelines finalized and disseminated (e and hard copies, power point slides) • Technical assistance provided by NMCD and partners • Resources set aside (Focal point identified and supported, budget for planned activities).	• Workshops / online (virtual) meetings to do 1,2, 3, 4 and 5 • Implementation of planned activities • Coordination mechanisms (RBM meetings, MAAM TF, etc.)	• Sectors/MDAs/Districts Development Plans with identified health and malaria related actions • Periodic technical updates / progress reports based on planned	• % of Sectors / MDAs / Districts that engaged (plans, capacity built, implementing, and reporting) • % of malaria SMART Sectors/MDAs/Districts	• Reduced malaria burden (incidence and prevalence) • Reduced burden on the health sector (IMR, U5MR, MMR, PMR), • Health intervention coverage by indices (immunization, nutrition, etc.) by sectoral contributions • Reduced school absenteeism in school aged children • Improved productivity • Increased Income Per Capita

Monitoring and Evaluation Mechanism - How to measure?

Existing monitoring and evaluation (M&E) platforms such as program reviews, assessments and surveys be it at health facility, sectoral and population based levels will be optimized. One or combinations of the various information gathering activities listed below (Figure 2 Monitoring and evaluation mechanism) will apply and can be reviewed as occasion demands.

Figure 2. Monitoring and Evaluation Mechanism



Performance monitoring framework

The framework is a Surveillance, Monitoring & Evaluation (SME) implementation guide for the malaria community led by the national malaria programme to measure progress and assess performance periodically (See Annex 4: - Performance monitoring framework).

The indicator matrix (see Annex 3: -) provides specific information on each indicator including: by Name; Definition, specifying the numerator and denominator; Breakdown by level of data disaggregation; Comments for consideration; Source of data; Means of Verification; Frequency; Lead / Responsible partner organization; Collaborating partners; and any other relevant information.

Beyond the indicator matrix, an Indicator Reference sheet describes each indicator in some depth. A national programme manager or his / her representative should be able to use the framework to identify malaria control goals, to create strategies for accomplishing those goals and to align international and national standards and reporting with those of other countries. SME officers and local health staff can use the indicator reference sheets to ensure collected data are reported appropriately and consistently. A typical indicator reference sheet is shown in Annexe ...)

CONCLUSION:

In order for Uganda to achieve its goal of a malaria-free nation by 2030, there is need for combined efforts from all relevant sectors in terms of planning, resource mobilization and allocation, implementation, reviews and monitoring progress.

Guidelines for mainstreaming malaria control activities has to provide guidance on how to actualize the budget call circular recommendations, summarized main malaria control interventions, provided step by step process of mainstreaming malaria and provided a framework for monitoring the guidelines.

Emphasis has been alluded to rolling out mass action against malaria initiative, all sectors, communities and households becoming malaria smart and decentralizing implementation of the Uganda Malaria Reduction and Elimination Strategic Plan.

4.0 ANNEXES

Annex 1. Sectors and Agencies

Table 1. Security

001	Internal Security Organisation (ISO)
004	Defence (Incl, Auxilliary)
159	External Security organisation (ESO)

Table 2. Works and Transport

016	Works and Transport
113	Uganda National Roads Authority
118	Road Fund
850	LG Works and Transport
?	Transport Corridor Project
122	KCCA Roads Rehabilitation Grant

Table 3. Agriculture

010	Agriculture, Animal Industry and Fisheries
121	Dairy Development Authority
125	National Animal Genetic Res. Centre and Data Bank
142	National Agricultural Research Organization (NARO
152	NAADS Secretariat
155	Uganda Cotton Development Organization
160	Uganda Coffee Development Authority
501-850	LG Agriculture and Commercial Services
122	KCCA Agriculture Grant

Table 4. Education

013	Education and Sports
023	Ministry of Science, Technology and Innovation
132	Education Service Commission
136	Makerere University
137	Mbarara University
138	Makerere University Business School
139	Kyambogo University
140	Uganda Management Institute
149	Gulu University

111	Busitema University
127	Muni University
128	UNEB
301	Lira University
303	National Curriculum Development Centre
307	Kabale University
308	Soroti University
501-850	LG Education
122	KCCA Education Grant

3.5: HEALTH

014	Health
107	Uganda Aids Commission (Statutory)
114	Uganda Cancer Institute
115	Uganda Heart Institute
116	National Medical Stores
134	Health Service Commission
151	Uganda Blood Transfusion Service (UBTS)
161	Mulago Hospital Complex
162	Butabika Hospital
304	Uganda Virus Research Institute
163-176	Regional Referral Hospitals
501-850	LG Health
122	KCCA Health Grant

3.6: WATER AND ENVIRONMENT

019	Water
019	Environment
157	National Forestry Authority
150	National Environment Management Authority
302	Uganda National Meteorological Authority
501-850	LG Water and Environment
122	KCCA Water, Env.& Sanitation Grant

3.7: JUSTICE/LAW AND ORDER

007	Justice Court Awards (Statutory)
007	Justice, Attorney General excl Compensation
007	Justice, Attorney General - Compensation

009	Internal Affairs (Excl. Auxiliary forces)
101	Judiciary (Statutory)
105	Law Reform Commission (Statutory)
106	Uganda Human Rights Comm (Statutory)
109	Law Development Centre
119	Uganda Registration Services Bureau
120	National Citizenship and Immigration Control Board
133	DPP
144	Uganda Police (incl LDUs)
145	Uganda Prisons
148	Judicial Service Commission
305	Directorate of Government Analytical Laboratory
309	National Identification and Registration Authority

3.8: ACCOUNTABILITY

008	MFPED
103	Inspectorate of Government (IGG) (Statutory)
112	Directorate of Ethics and Integrity
129	Financial Intelligence Authority
130	Treasury Operations
131	Audit (Statutory)
141	URA
143	Uganda Bureau of Statistics
153	PPDA
501-850	District Grant for Monitoring and Accountability
122	KCCA Accountability Grant

3.9: ENERGY AND MINERAL DEVELOPMENT

017	Energy and Minerals
123	Rural Electrification Agency (REA)

3.10: TOURISM, TRADE AND INDUSTRY

015	Trade, Industry and Cooperatives
022	Tourism, Wildlife and Antiquities
154	Uganda National Bureau of Standards
110	Uganda Industrial Research Institute
117	Uganda Tourism Board
306	Uganda Export Promotion Board
501-850	District Trade and Commercial Services

3.11: LANDS, HOUSING AND URBAN DEVELOPMENT

012	Lands, Housing and Urban Development
156	Uganda Land Commission
501-850	USMID Grant

3.12: SOCIAL DEVELOPMENT

018	Gender, Labour and Social Development
124	Equal Opportunities Commission
501-850	LG Social Development
122	KCCA Social Development Grant

3.13: ICT & NATIONAL GUIDANCE

020	Ministry of ICT and National Guidance
126	National Information Technology Authority (NITA -U)

3.14: PUBLIC SECTOR MANAGEMENT

003	Office of the Prime Minister
003	Information and National Guidance
005	Public Service
011	Local Government
021	East African Affairs
108	National Planning Authority (Statutory)
146	Public Service Commission
147	Local Govt Finance Commission
501-850	LG Unconditional
501-850	LG Discretionary Development Equalisation
501-850	LG Public Sector Management
122	Kampala Capital City Authority (KCCA)

3.15: PUBLIC ADMINISTRATION

001	Office of the President (excl E&I)
002	State House
006	Foreign Affairs
100	Specified Officers - Salaries (Statutory)
102	Electoral Commission (Statutory)
201-231	Missions Abroad

3.16: LEGISLATURE

104	Parliamentary Commission (Statutory)

Annex 2. Sector entry points and actions

Table 1. Ministry of Works and Transport

Entry point	Action	Malaria outcome	Sectoral outcome
Research and guidelines	Develop norms and standards for malaria- safe housing, buildings and land use	Reduced vector load and human contact with vector	Better functioning urban and peri-urban settings and social and economic growth
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels		
	Conduct research on mosquito repellant plants/ flowers that can be grown around homes.		
Planning	Separate residential and productive areas		
	Improve urban drainage, ensure LSM as part of infrastructure development		
Upgrade, maintenance	Clear drains of blocking garbage, plant eucalyptus to drain swampy areas		
	Improve housing (ceiling and screens); Old LLINs can be used for this purpose as a final disposal.		

Table 2: Ministry of Agriculture Animal Industry and Fisheries (MAAIF)

Entry point	Action	Malaria outcome	Sectoral outcome
Research and guidelines	Guidance for introduction of malaria-smart crops and production systems	Reduced vector load and human contact with vector	Achieve food security Increased agricultural production and productivity Increased household income social and economic development
Extension work	Increase efficiency, introduce improved and malaria-smart crops and production methods		
	Introduce and promote larvivous fish feeding mosquito larvae and provision of food for communities		
	Identify and eliminate anopheline larvae in urban agriculture eg: rice farms		
	Support farmers to spray animals with acaricides		

Table 3. Ministry of Education and Sports

Entry point	Action	Malaria outcome	Sectoral outcome
Enrolment	Target poor and disadvantaged areas and households	Reduced vector load, human contact with vector, & parasite load	Improved equity and enrolment rates
	Provision of school meals, Secondment of teachers		
Curriculum	Include malaria-safe habits &information on the malaria community project in teaching curriculum (Roles of Individuals, management, Teachers, parents, community)		Improved educational achievement & cognitive performance
	Include Mass action Against Malaria (MAAM) in Music Dance and Drama		
	Behavioral change agent on environment management and health seeking behavior		
Extension work Standards	Promote Malaria free communities around Schools as buffer zones (hard immunity)	Reduced vector load, human contact with vector, & parasite load	Improved educational achievement & cognitive performance
	Implement Dormitory/ classrooms protection programmes (e.g. provision of LLINs for day scholars, IRS in Dormitories, diagnosis and treatment in school clinics)		
	Building renovation and construction, including kitchens and pit latrines		
	Deworming in primary schools every four months		
	Promote formation and functionalization of school health clubs with malaria activities in school & surrounding communities, Malaria talking compounds		
Standards	Develop norms &standards for inclusion in sectoral guidelines &procedures		
	Develop Health–smart (Malaria) environmental impact assessments on all school projects		

Table 4. Ministry of Health

Entry point	Action	Malaria outcome	Sectoral outcome
Research and standards	Undertake a Malaria stakeholder assessment.	Reduced vector load, human contact with vector, and parasite load	Improved health and social growth
	Create a convening mechanism of Uganda Malaria Multisectoral Action Committee (Chaired by Prime Minister`s Office) and network secretariat(NMCD/MOH) to coordinate activities		
	Develop coalitions and networks to simplify coordination, at any level, while also amplifying the voice of partners.		
	Develop norms and standards for inclusion in sectoral guidelines and procedures (including appropriate tools for health delivery)		
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels		
	Conduct research on mosquito repellant plants/ flowers that can be grown around homes.		
Health service delivery	Resource mobilization, support Multisectoral collaboration action against malaria,	Reduced parasite load & reduced risk of drug resistance	Improved health and social growth
	Avail access to free quality primary health care services in both public and private sectors		
	Implement public programmes (e.g. provision of LLINs, IRS, LSM, diagnosis and treatment)		
Blood Access	The timely availability of safe blood and blood products is essential in all health care facilities in which Transfusion is performed to save lives of patients with severe anaemia due to Malaria,		
Capacity building	Strengthen the roles Community health workers -outreach		
	Identify gaps in Health service delivery and build capacity to fill the gaps		
Inspection and monitoring	On-site control of compliance with Health services norms and standards in public and private health- sector actors		

Table 5. Ministry of Water and Environment (MOWE)

Entry point	Action	Malaria outcome	Sectoral outcome
Research & standards	Develop norms and standards for inclusion in sectoral guidelines and procedures, NEMA to write a notice on the reform to all sectors	Reduced vector load & human contact with vector	Safer urban & peri- urban environments
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels,		
	Malaria mitigation to be included as an EIA requirement: by NEMA adding it on the list of requirements to investigate during EIA		
	Identify mosquito repellant plants suitable for water bodies banks and swamps peripherals		
	Regulate private pest control operators as part of national insecticide-resistance management plan		
Swampy and shallow Water body areas (water for production Dams, irrigation schemes	Larviciding (At least 3 meters) shallow swamp peripherals, where possible slash and keep clear of grass.		
	Plant mosquito repellant plants in the swamp/ water bodies banks and peripherals		
Inspection	On-site control of compliance with norms and standards		
	Improve pesticide management		
Extension work	Implement workplace protection programmes (e.g. provision of LLINs, IRS, diagnosis and treatment)	Reduced vector load & human contact with vector	Safer urban &peri- urban environments
Research and standards	Develop norms and standards for inclusion in sectoral guidelines and procedures		
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels		
	Regulate private energy and mineral extraction operators as part of Malaria smart operations		
Inspection	On-site control of compliance with norms and standards		
	Malaria is included in the activities under Environmental and social Management Plans in all projects.		

Table 6. Ministry of Internal Affairs

Entry point	Action	Malaria outcome	Sectoral outcome
Collaboration Extension	Enforcement of Bye laws and ordinances of Health –smart (Malaria) building standards	Reduced vector load, human contact with vector, and parasite load	Social and economic growth
	Ensure health care and other services for military, police and prisons collaborate with NMCD, local authorities and communities		
	Implement workplace protection programmes (e.g. provision of LLINs, IRS, diagnosis and treatment)		
	Support the strengthening of community structures for empowerment, responsibility, compliance and self-control		
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels		

Table 7.Ministry Of Finance Planning And Economic Development (MOFPED)

Entry point	Action	Malaria outcome	Sectoral outcome
Planning and budget pro-cess Loans/ Grants negotiations	Earmark resources to develop the most deprived areas	Decreased malaria morbidity and mortality	Increased equity and social and economic productivity
	Earmark resources for malaria-smart development in sectoral budgets		
	Earmark property taxes for mosquito abatement activities		
	Require health and environmental impact assessments to be conducted & monitored		
Planning and budget process Loans/ Grants negotiations	Allocate earmarked funds for Malaria	Decreased malaria morbidity and mortality	Increased equity and social and economic productivity
	Earmark resources to develop the most deprived areas		
	Earmark resources for malaria-smart development in sectoral budgets		
	Earmark property taxes for mosquito abatement activities		
	Require health and environmental impact assessments to be conducted & monitored		

Entry point	Action	Malaria outcome	Sectoral outcome
Planning and budget process Loans/ Grants negotiations	Implement the 0.7 percent of GNI target for Official Development Assistance (ODA)	Decreased malaria morbidity and mortality	Increased equity and social and economic productivity
	Fulfil the 10 commitments in the Copenhagen Declaration on Social Development;		
	Implement the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action		
	Meet the Sustainable Development Goals (SDG) targets		
	Base the post-2015 agenda on the values of human rights, equity and sustainability		
	Improve Uganda`s access to industrial countries' markets, including for agricultural products and labor-intensive manufactures		
	Ensure that Malaria features in all BCCs and Track Funding from Multisectoral budgets		

Table 8. Ministry Of Energy and Mineral Development (MOEMD)

Entry point	Action	Malaria outcome	Sectoral outcome
Extension work	Implement workplace protection programmes (e.g. provision of LLINs, IRS, diagnosis and treatment)	Reduced vector load & human contact with vector	Safer urban &peri- urban environments
Research and standards	Develop norms and standards for inclusion in sectoral guidelines and procedures		
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels		
	Regulate private energy and mineral extraction operators as part of Malaria smart operations		
Inspection	On-site control of compliance with norms and standards		

Table 9. Ministry of Trade Tourism, Wildlife and Antiques (MOTW & A)

Entry point	Action	Malaria outcome	Sectoral outcome
Research and guidelines	Guidelines for introduction of malaria-smart methods	Reduced vector load and human contact with vector	Increased productivity and social and economic development
	Promote use of Malaria smart decorations		
	Promote use of mosquito repellent oils, creams and soap as standard supplies to Hotel customers		
	Promote use of mosquito repellant plants/ flowers that can be grown around hotels/ tourism sites.		
Extension work	Promote Malaria free communities around hotels Tourism sites as buffer zones(hard immunity)		
	Implement workplace protection programmes (e.g. provision of LLINs, IRS, diagnosis and treatment)		
	Ensure larval source management (LSM) in pits used for septic tanks, and construction		

Table 10. Ministry of Trade and Industry and Cooperatives

Entry point	Action	Malaria outcome	Sectoral outcome
Research and guidelines	Guidelines for introduction of malaria-smart methods	Reduced vector load and human contact with vector	Increased productivity and social and economic development
	Reduce local barriers for malaria commodities		
	Conduct research on mosquito repellant plants/ flowers that can be grown around homes. Promote pottage industry with the seeds/ seedlings.		
	Provide incentives and promote research and trade in mosquito repellent oils, creams and soap		
Extension work	Increase efficiency, introduce improved production methods		
	Implement workplace protection programmes (e.g. provision of LLINs, IRS, diagnosis and treatment)		
	Ensure larval source management (LSM) in pits used for brick making, rock quarries and construction		

Table 11. Ministry Of Lands and Urban Development (MOLHUD)

Entry point	Action	Malaria outcome	Sectoral outcome
Research and guidelines	Develop norms and standards for malaria- safe housing, buildings and land use	Reduced vector load and human contact with vector	Better functioning urban and peri-urban settings and social and economic growth
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels		
	Conduct research on mosquito repellant plants/ flowers that can be grown around homes.		
Planning	Separate residential and productive areas		
	Improve urban drainage, ensure LSM as part of infrastructure development		
	Malaria messages on construction site sign posts		
Upgrade, maintenance	Clear drains of blocking garbage, plant eucalyptus to drain swampy areas Clear drains of blocking garbage, larviciding 3 meters swamp peripherals, where possible slash and keep clear of grass.		
	Improve housing (ceiling and screens); Old LLINs can be used for this purpose as a final disposal.		

Table 12. Ministry Of Labor and Social Development

Entry point	Action	Malaria outcome	Sectoral outcome
Collaboration Extension	Ensure health care and other services for military, police and prisons collaborate with NMCD, local authorities and communities	Reduced vector load, human contact with vector, and parasite load	Social and economic growth
	Implement workplace protection programmes (e.g. provision of LLINs, IRS, diagnosis and treatment)		
	Support the strengthening of community structures for empowerment, responsibility, compliance and self-control		
	Develop Health–smart (Malaria) environmental impact assessments on all projects at all levels		

Table 13. Office of The Prime Minister (OPM)

Entry point	Action	Malaria outcome	Sectoral outcome
Coordination, Inspection and monitoring	Undertake a Malaria stakeholder assessment.	Reduced parasite load & reduced risk of drug resistance	Social and economic growth
	Create a convening mechanism of Uganda Malaria Multisectoral Framework (Chaired by Prime Minister's Office) and network secretariat(NMCD/MOH) to coordinate activities		
	Develop coalitions and networks to simplify coordination, at any level, while also amplifying the voice of partners.		
	Jointly agree on the purpose, goals, and expected outcomes of the partnership.		
	Establish national multi-sectoral Malaria mechanisms (drafting TORs, rules of procedure, codes of conduct, agree on the roles and responsibilities of each partner etc.)		
Coordination, Inspection and monitoring	Create a clear Uganda Malaria Multisectoral framework for taking action and monitoring;	Reduced parasite load & reduced risk of drug resistance	Social and economic growth
	Arrange either regular external evaluations or joint progress reviews to hold one another accountable for commitments and to recognize progress towards the agreed partnership goals.		
	Analyse ways of integrating the prevention and control of Malaria into existing development programmes (national development plan, sector development plans).		
	Work with MOF & development partners to identify sustainable funding for multisectoral mechanisms to reduce Malaria risk factors		

Table 14. Ministry Of Local Government (MOLG)

Entry point	Action	Malaria outcome	Sectoral outcome
Planning phase	Bring stakeholders together, and establish priorities, indicators and targets	Reduced vector load, human contact with vector, and parasite load	Social and economic growth
	Development and enforcement of by- laws and ordinances of Health –smart (Malaria) building standards, infrastructure, in both public and private establishments,		
Implementing phase	Ensure stakeholder accountabilities		
	Promote pottage industry with the seeds/ seedlings.		
Planning phase	Malaria-propagating activities: review all sectors (operation, practices, procedures and production systems), identify potentially contributing to sustaining or increasing vector load, parasite transmission or insecticide and drug resistance.	Reduced vector load, human contact with vector, and parasite load	Social and economic growth
	Develop and promote the use of approaches that mitigates against propagation of malaria (Eg; Brick making, Roads and housing Construction works, drainage channels and culverts, irrigation schemes, rice schemes and cultivation in water logged area)		
	Have a larviciding as part of the larval source management budget (the NMCP / partners will provide technical support)		
	Enacting bye laws for promotion of uptake of Malaria interventions		

Entry point	Action	Malaria outcome	Sectoral outcome
Implementing phase	Facilitation of Health workers, to improve motivation, working environment, timely and quality reporting.	Reduced vector load, human contact with vector, and parasite load	Social and economic growth
	Enforcement of abuse of malaria interventions eg Nets for other uses.		
	DHT/ District Council meetings with Malaria as a constant agenda item (minutes).		
	Commemoration of annual World Malaria Week/ Day at District		
	District and Health centers staffing levels (Shifts)		
	Introduction of public health inspectors at all levels		
	Supplies of Health center (drugs and other materials)		
	Supervision of District leadership (CAO, RDC, DISO, DPC, LCV, Mayors, MPs) and follow up on Malaria Actions.		
	Set up District MAAM Task forces comprised of: Chief Administrative officer CAO(as Chairman), Chairman LCV, Regional Referral/ district Hospital Director, District Health Education Officer DHEO, District Health Officer DHO(as secretary),District Surveillance Focal point (DSFP), Biostatistician, District Laboratory Focal Person (DLFP) District Drugs Inspector, Health Management Information System (HMIS FP), Vector Control Officer VCO / MFP, District Education Officer(DEO),District Community Development Officer (DCDO),Assistant District Health Officer/ Environmental Health (ADHO/EH),District Production Officer(DPO), District Natural Resources Officer(DNRO), District Engineer, Municipal Town Clerk, Municipal Health Officer, Municipal Education Officer, Municipal Engineer.		
	Malaria Advocacy by District leadership (Ceremonies, Sermons)		

Table 15. Ministry of Public Service

Entry point	Action	Malaria outcome	Sectoral outcome
Planning phase	Implement workplace & homes protection programmes (E.g. provision of LLINs, IRS, diagnosis and treatment)	Reduced vector load, human contact with vector, and parasite load	Social and economic growth
	Review staffing norms		
Implementing phase	Ensure stakeholder accountabilities		
	Standardise RRH staffing for consultants		
	Staffing for teaching hospitals		

5.0 APPENDICES

Appendix 1: Selected SDG Indicators for multisectoral malaria action

SDG Family		Indicator
Politics/institutions		16.6.2 Proportion of population satisfied with their last experience of public services 16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age
		17.8.1 Proportion of individuals using the Internet 17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics
Economics		8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities 8.6.1 Proportion of youth (aged 15–24 years) not in education, employment or training
		9.1.1 Proportion of the rural population who live within 2 km of an all-season road 9.c.1 Proportion of population covered by a mobile network, by technology
		10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population 10.3.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law
		12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP 12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

SDG Family	Indicator	
Social		.1.2.1 Proportion of population living below the national poverty line, by sex and age 1.4.1 Proportion of population living in households with access to basic services
		2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight) 2.3.2 Average income of small-scale food producers, by sex and indigenous status
		4.1.1 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex 4.a.1 Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)
		5.3.1 Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18 5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments
		7.1.1 Proportion of population with access to electricity 7.1.2 Proportion of population with primary reliance on clean fuels and technology
		11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing 11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically

SDG Family	Indicator	
Environmental		6.6.1 Change in the extent of water-related ecosystems over time 6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management
		13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies 13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula
		14.5.1 Coverage of protected areas in relation to marine areas 14.b.1 Degree of application of a legal/regulatory/ policy/institutional framework which recognizes and protects access rights for small-scale fisheries
		15.3.1 Proportion of land that is degraded over total land area 15.9.1 Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020
Health system		3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population) 3.b.1 Proportion of the target population covered by all vaccines included in their national programme

Appendix 2: Malaria in All SDGs

SDG wheel illustrates the in- divisive nature of the SDGs and that they all contribute to and benefit from reducing the malaria burden.

Centre	Inner doughnut Contributes to less life-years lost to malaria death and illness	Outer doughnut SDG numbers &short titles in the below order
Malaria in All SDGs Less productive life-years lost to malaria death and illness benefit all SDGs	Peaceful, inclusive societies with accountable and transparent institutions free of discrimination and corruption.	16 Peace, justice and strong institutions
	Multi-stakeholder collaboration using disaggregated data for monitoring, decision-making and accountability.	17 Partnerships for the goals
	Inclusive and sustainable economic growth, full employment, and decent work for all – equal pay for equal value.	8 Decent work and economic growth
	Inclusive and sustainable industrialization and resilient infrastructures with equitable access for all.	9 Industry innovation and infrastructure
	Eliminate discriminatory laws, adopt policies for greater equality, regulate financial markets and institutions.	10 Reduced inequalities
	Sustainable management and efficient use of natural resources; information and awareness for harmony with nature.	12 Responsible consumption and production
	Equal rights to resources, access to basic services, control of property, natural resources, and new technology.	1 No poverty
	Access to safe, nutritious and sufficient food; sustainable food production systems that help maintain ecosystems.	2 Zero hunger
	Equitable primary and secondary education – ensuring all acquire knowledge and skills for sustainable development.	4 Quality education
	End discrimination and violence against women and girls; ensure full participation, sexual and reproductive rights.	5 Gender equality
	Access to reliable and sustainable modern energy – also for the most disadvantaged countries and population groups.	7 Affordable and clean energy
	Inclusive planning and management, affordable quality housing, upgrade slums, drainage and disasters protection.	11 Sustainable cities and communities
	Access to and participation of communities in improving water, sanitation and water-related ecosystems.	6 Clean water and sanitation
	Resilience and capacity for planning and management in particular related to water and marginalized communities.	13 Climate action
	Manage aquaculture in brackish water and intrusion of seawater into low-lands, and protect costal ecosystems.	14 Life below water
	Conserve and restore biodiversity, increase capacity of local communities to sustainably use inland ecosystems.	15 Life on land
	Equitable access to quality primary health care services; and community participation in planning and management.	3 Good health and well-being

Appendix 3: Indicator Matrix:

S/ No.	Indicator Name	Break-down (Level of data disaggre-gation)	Defi-nition (De-scrip-tion)	Com-ments for consid-eration	Source of data	Means of Verifica-tion	Fre-quen-cy	Lead / Re-spon-sible partner organi-zation (per-son)	Collab-orating part-ners	Any other spe-cific infor-ma-tion
1										
2										
3										

Appendix 4 : Performance monitoring framework

Indicator	Baseline			Targets				
	Year	Value	Source	2020/ 2021	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025
Goal: To engage the various Sectors/MDAs/Districts and mainstream malaria control and elimination interventions into their action plans and become a malaria SMART Sectors /MDAs / Districts.								
Indicator: - % of Sectors / MDAs / Districts that engaged (plans, capacity built, implementing, and reporting) - % of malaria SMART Sectors/ MDAs/ Districts								
Objective 1: All Sectors/MDAs/Districts would have a clear understanding of relevant malaria interventions								

Indicator: - % of Sectors / MDAs / Districts with at least two participants that have clear understanding malaria interventions from orientation workshops								
Objective 2: A well described step-by-step process of main streaming malaria interventions in sectoral and institutional plans								
Indicator: - % of Sectors / MDAs / Districts with malaria incorporated in annual plans and with identified budget for malaria								
Objective 3: The relevant capacity to plan, implement and monitor malaria control interventions in all sectors and institutions								
Indicator: - % of Sectors / MDAs / Districts implementing and reporting progress on planned malaria related activities								

6.0 REFERENCES

1. Ministry of Health: **Mid Term review of the Uganda Malaria Reduction Strategic Plan 2014-2020.** In. Edited by National Malaria Control Division. Kampala 2017.
2. National Malaria Control Division: **Malaria Quarterly Bulletin.** In.; 2019.
3. World Health Organization: **World Malaria Report 2019.** Reference Source 2019.
4. Ministry of Health: **Uganda Malaria Programme Review Report 2014-2019.** In. Edited by National Malaria Control Division; March 2020.
5. Uganda Bureau of Statistics, ICF Macro, National Malaria Control Programme: **Uganda Malaria Indicator Survey, 2019:** Uganda Bureau of Statistics; 2019.
6. International Monetory Fund: **Uganda's Poverty Eradication Action Plan.** In: Poverty Reduction Strategy Papers (PRSPs). Kampala: Ministry of Finance, Planning and Economic Development,2020.
7. Ministry of Health: **Mass Action Against Malaria (MAAM) Operational Guidelines (draft).** In. Edited by NNCD. Kampala; 2020.
8. Ministry of Health: **Uganda National eHealth Policy.** In.; 2016.
9. Ministry of Health: **HEALTH SECTOR DEVELOPMENT PLAN 2015/16 - 2019/20.** In. Kampala; 2015.
10. Goverment of Uganda: **National Development Plan III.** In.; 2020.
11. Ministry of Health: **Uganda Malaria Reduction and Elimination Strategic Plan 2021-2025.** In.; 2020.
12. Cohen JM, Smith DL, Cotter C, Ward A, Yamey G, Sabot OJ, Moonen B: **Malaria resurgence: a systematic review and assessment of its causes.** Malaria journal 2012, 11(1):122.
13. Goverment of Uganda: **Budget call circular FY 2020-2021.** In. Kampala: Ministry of FInance, Planing and Development; 2020.

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