



**FEDERAL MINISTRY OF HEALTH**

**DEPARTMENT OF PUBLIC HEALTH**

**GUIDELINES  
FOR  
MALARIA-LYMPHATIC FILARIASIS CO-  
IMPLEMENTATION IN NIGERIA**



September 2013

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# Foreword

Malaria and lymphatic filariasis are infectious diseases that are transmitted by mosquitoes. An estimated 97% and 66% of the Nigerian population are at risk for malaria and lymphatic filariasis respectively. Together, both malaria and lymphatic filariasis are responsible for high mortality and or morbidity with several millions at risk.

The current distribution of Long Lasting Insecticidal Nets (LLINs) to prevent human-mosquito contact for malaria control has shown appreciable impact on lymphatic filariasis prevalence. The adoption of community directed intervention strategy for the promotion of Home Management of Malaria (HMM) and for Mass Drug Administration (MDA) in the elimination of lymphatic filariasis provides opportunities for joint programme approach for the elimination of both malaria and lymphatic filariasis.

The burden of malaria and lymphatic filariasis constitutes a major public health concern and the Federal Ministry of Health with support from partners has invested a lot of resources towards their elimination. The current use of community participatory strategies for increasing access to health services makes the co-intervention against the two parasitic diseases necessary at this time.

The Federal Ministry of Health set up a committee to develop guidelines for co-implementation of malaria and lymphatic filariasis so that both diseases and their effects are controlled and, in fact eliminated using synergistic tools.

This document contains guidelines for implementing activities at all levels of operation by programme implementers. The guidelines have been reviewed at various stages to ensure inclusiveness and understanding.

I recommend the guidelines to all those currently engaged in the elimination of both malaria and lymphatic filariasis and welcome comments based on lessons learned in the field.



**Professor C. O. Onyebuchi Chukwu**

**Honourable Minister of Health**

# Acknowledgements

The preparation of these guidelines has been very tasking for the committee that was given the assignment to draw them up.

We would like to express appreciation to the chairman of this subcommittee, Professor Oladele Akogun and members of the committee.

We appreciate the immense support given by the Malaria Consortium and The Carter Center to enable the subcommittee carry out their assignment.

The Honourable Minister of Health, Professor C.O. Onyebuchi Chukwu, and the Permanent Secretary are highly appreciated for the commitment and immense support in the development of the guidelines.



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**Director Public Health**  
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# List of Acronyms

ACT	Artemisinin Based Combination Therapy
ANC	Antenatal Clinic
APHA	American Public Health Association
BCC	Behaviour Change Communication
CBM	Christoffel Blinden Mission
CDA	Community Development Association
CDD	Community Drug Distributor
CORPS	Community Oriented Resource Persons
D/DPH	Director Department of Public Health
DFID	Department for International Development
FCT	Federal Capital Territory
FLHF	Front Line Health Facility
FMOH	Federal Ministry of Health
GDP	Gross Domestic Product
GF	Global Fund
HF	Health Facility
HKI	Helen Keller International
HMM	Home Management of Malaria
HMH	Honourable Minister of Health
HMSH	Honourable Minister of State for Health
ICT	Immunochromatographic Tests
IRS	Indoor Residual Spraying
ITN	Insecticide treated nets
IVM	Integrated Vector Management
LF	Lymphatic Filariasis
LGA	Local Government Area
LLIN	Long Lasting Insecticidal Nets
LSIM	Logistics Supply Information Management
MAPS	Malaria Action Programme for States
MCP	Malaria Control Programme
MDA	Mass Drug Administration
MIM	Multilateral Initiative on Malaria
MITOSATH	Mission to Save the Helpless
M&E	Monitoring and Evaluation

NGO	Non Governmental Organization
NLEP	National Lymphatic Filariasis Elimination Programme
NMA	Nigerian Medical Association
NMCP	National Malaria Control Programme
NTDs	Neglected Tropical Diseases
PHC	Primary Health Centre
PSH	Permanent Secretary Health
RAPLOA	Rapid Assessment Procedure for Loiasis
RBM	Roll Back Malaria
RH	Reproductive Health
RMCGs	Role Model Care Givers
SAEs	Severe Adverse Effects
SBCC	Social Behaviourial Change Communication
SMCP	State Malaria Control Programme
SMS	Short Message Service
SuNMaP	Support for National Malaria Control Programme
TCC	The Carter Center
TV	Television
UKAID	United Kingdom Agency for International Development
USAID	United States Agency for International Development
USD	United States Dollars
VHCs	Village Health Committees
VDC	Village Development Committee
WHO	World Health Organization

## Common Definitions

Co-implementation:	Integrated implementation of two or more activities in a cost effective manner
Community Directed intervention	Process of health intervention where beneficiary community as a unit partners with other stakeholders in planning, decision making, implementation and review of intervention outcome
Logistics	In the public and NGO sectors, it is generally agreed that logistics is a support service to the programs and as such must provide programs with goods, materials and equipment “at the right place, at the right time, in the right quantity and quality, and at the right price”. Its key functions are: assessment and planning, procurement, transport and storage management, and reporting (i.e.: supply chain management). Logistics must put in place standardised systems and procedures for control and commodity tracking, in order to provide full accountability.
LLIN Supply Chain	(Also called logistics chain). This is defined as the series of events in the provision of LLINs for mass distribution campaigns. In other words: the various successive steps that must be followed in order to make commodities available at the distribution sites
LLIN Supply Chain Management	Refers to the planning, coordination and execution of all the activities that contribute to an efficient and timely transit of commodities through the various steps along the supply chain.

These terms each apply to a specific section of the supply chain.

## Macro and Micro Logistics

Macro logistics starts with procurement and ends with the delivery of the nets to the LGA stores. Micro logistics covers the transport from LGA to communities



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## Assent to Guidelines

Malaria and lymphatic filariasis have same vector and can benefit from intervention strategies targeted at each disease. In consideration of this, stakeholders have agreed to co-implement activities of the two programmes for the control and elimination of both diseases in a cost effective manner. This has necessitated the need to develop the guide lines on malaria – lymphatic filariasis co-implementation. These guidelines will promote the common use of resources and strategies for the control and elimination of malaria and lymphatic filariasis in Nigeria. Both malaria and lymphatic filariasis programmes have separate policies that support co-implementation (refer to malaria and NTDs policies).

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# Overview of the Guidelines

The National Malaria Control Programme provides oversight, coordination and policy direction towards the planning, implementation, monitoring and evaluation of malaria control activities in Nigeria while the National Lymphatic Filariasis Elimination Programme provides a similar function for lymphatic filariasis in the Country. This document provides a broad guideline for co-implementation of the two programmes at the Federal, State, Local Government, Ward and Community levels in Nigeria in a cost effective manner towards the control and eventual elimination of these diseases in the country.

The guideline is divided into the following sections:

Section one provides background information including a brief overview of malaria and lymphatic filariasis, followed by section two on the goals and objectives of the Malaria-LF co-implementation. Section three is on the strategic direction for malaria and lymphatic filariasis co-implementation and section four is on Planning and Coordination of the disease programmes at all levels. . Section five This guideline describes logistics and logistics supply information management processes in section five.. In section six, the guideline provides information on the various methods of intervention against malaria and lymphatic filariasis.

The Malaria-LF co-implementation training and re-training is highlighted in section seven. Furthermore, morbidity management including diagnosis, treatment and referral are in section eight while section nine is on supervision, monitoring and evaluation and operational research. Section ten is on surveillance at malaria and lymphatic filariasis sentinel sites and section eleven highlights communication and social mobilization including behaviour change communication.

## Box : Development and use of the guidelines

A sub-committee comprising the two programmes and partners developed this set of guidelines through discussions with various programme implementers. Existing policies, protocols and guidelines were consulted.

These guidelines are to be used by implementers at all levels for the operationalization of co-implementation strategies in the control and elimination of the two diseases. The document is targeted at:

- The Federal level malaria and lymphatic filariasis programme personnel for:
  - Planning
  - Coordination
  - Supervision
  - Monitoring and evaluation
- The States and LGAs for:
  - Developing training details,
  - Coordinating of co-implementation
  - Providing supportive supervision
- The communities (VHWs, CDDs, RRMCGs, CORPS, etc.) for:
  - Mass Drug Administration (MDA),
  - Case detection and treatment
  - LLIN distribution along with monitoring of its use and care
  - Home Management of Malaria (HMM)
  - In-door Residual Spraying (IRS)
  - Communication and Social Mobilisation including Behaviour Change Communication (BCC)
  - Data collection and reporting
- Partners for:
  - Programme support
  - Planning
  - Monitoring and supervision

The guidelines will be periodically reviewed and modified as needed to respond to any lessons learned in the early phases of implementation.

# 1. Introduction

## 1.1 Background

Nigeria consists of 36 states and a Federal Capital Territory. The states and federal area are grouped into six geopolitical zones: North Central, North East, North West, South East, South South, and South West. There are 774 constitutionally recognized Local Government Areas (LGAs) in the country.

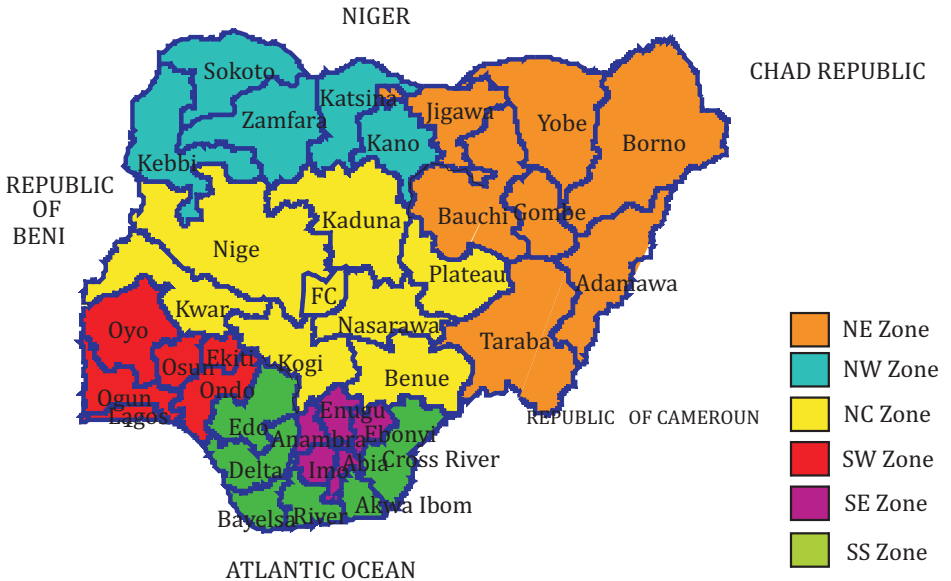


Figure 1: Map of Nigeria showing the six geo-political zones

13°53' north and longitudes 2°40' and 14°41' east. It is bordered by Niger in the north, Chad in the northeast, Cameroon in the east, and Benin in the west. To the south, Nigeria is bordered by approximately 850 kilometres of the Atlantic Ocean, stretching from Badagry in the west to the Rio del Rey in the east. With a total land area of 923,768 square kilometres, Nigeria is the fourteenth largest country in Africa. Nigeria is diverse in climate and topography, encompassing uplands (600 to 1,300 metres in the North Central zone), east highlands, and lowlands (less than 20 metres in the coastal areas). Additional lowlands extend from the Sokoto plains to the



Borno plains in the North, the coastal lowlands in western Nigeria, and the Cross River basin in the East. The highland areas include the Jos, Plateau, and Adamawa highlands in the North, which extend down to the Obudu Plateau and Oban Hills in the South East. Other topographic features include the Niger-Benue Trough and Chad Basin. Nigeria has a tropical climate. Wet and dry seasons are associated with the movement of the two dominant winds—the rain-bearing southwesterly winds and the cold, dry, and dusty northeasterly winds, commonly referred to as the Harmattan. The dry season occurs from October to March, with a spell of coolness accompanied by the dry, dusty Harmattan wind, felt mostly in the North in December and January. The wet season occurs from April to September. The temperature in Nigeria oscillates between 25°C and 40°C, and rainfall ranges from 2,650 millimetres in the southeast to less than 600 millimetres in some parts of the north, mainly on the fringes of the Sahara Desert. The vegetation that results from these climatic differences consists of mangrove swamp forest, savannah and Sahel grassland. Nigeria has a wide range of climatic, vegetation, and soil conditions, allowing potential for a wide range of agricultural production.

Agriculture has traditionally been the mainstay of Nigeria's economy. At the time of the country's independence, more than 75 percent of the country's formal labour force was engaged in agriculture, which also provided a satisfactory livelihood to more than 90 percent of the population. With the discovery of oil, petroleum usurped the dominant role of agriculture in the economy, especially in the country's foreign exchange earnings. By 2006, the contribution of agriculture to gross domestic product (GDP) was 32.5 percent, compared with 38.8 percent for oil and gas combined. Oil and gas now dominate the economy, contributing 99 percent of export revenues and 78 percent of government revenues. Within the non-oil sector, agriculture still plays a significant role, followed by industry, services, and wholesale/retail trade. Significant exports of liquefied natural gas commenced in late 1999, and these are slated to expand as Nigeria works to eliminate gas flaring.

## **2.1 Malaria and Lymphatic Filariasis epidemiology in Nigeria**

The geographic location of Nigeria makes the climate suitable for malaria and lymphatic filariasis transmission in all the geopolitical zones of the

country. It is estimated that up to 97% and about 70% are at risk of malaria and lymphatic filariasis infection respectively.

*Plasmodium falciparum* is the main species of malaria parasite that is found in Nigeria responsible for over 80% of total malaria burden while *Wuchereria bancrofti* is responsible for lymphatic filariasis.

Anopheles species are the main vectors of both parasites in Nigeria. Transmission is through the bite of the female anopheles mosquito during blood meal.

### 1.2.1 Background on Malaria and Lymphatic Filariasis in Nigeria

Nigeria contributes a quarter of malaria burden in Africa where over 90% of the population of are at risk. 50% of the population will have at least one attack per year. It is responsible for about 67% of all clinic attendance and is the commonest cause of absenteeism from offices, farms, markets, schools etc. Malaria accounts for 30% childhood mortality, 11% maternal mortality and reduces by 1% Nigeria's GDP annually. About 3 billion USD (N480b) lost annually. This could pay the annual salary of 2.2m Nigerians as minimum wage.

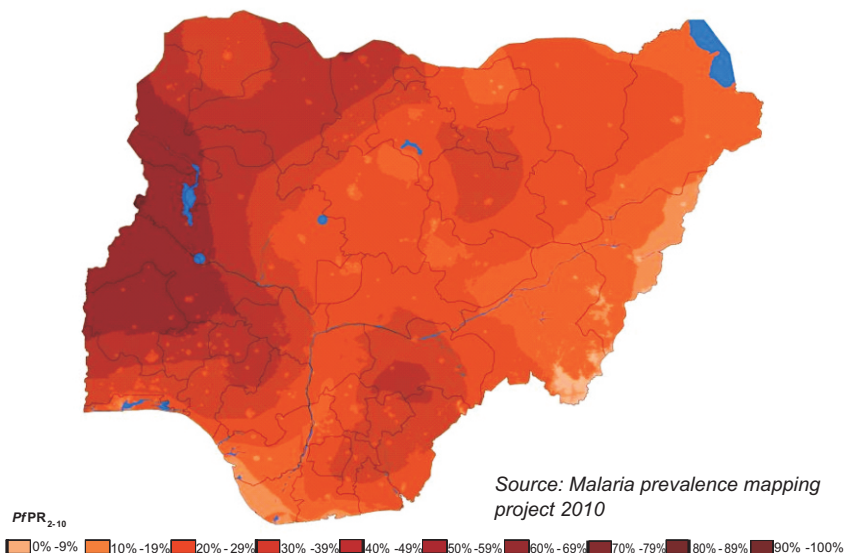


Figure :2010 Predicted Mean PfPR2-10 Binned 10 groups

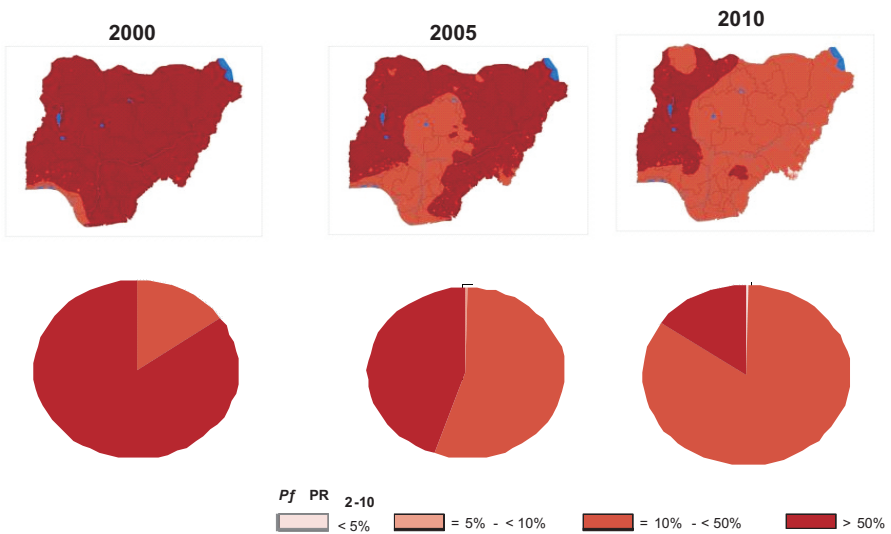


Figure : Gradual Shift from Hyperendemic to mesoendemic epidemiologic patterns

Out of 774 LGAs in Nigeria, Lymphatic Filariasis endemicity has been determined in 705 LGAs (91%). The prevalence studies indicated that out of 705 LGAs mapped, 541 LGAs (76.7%) are Lymphatic Filariasis endemic. Prevalence studies with ICT also indicated that of the total of 51,359 examined during the survey, 256 hydrocele and 234 lymphodema cases were seen.

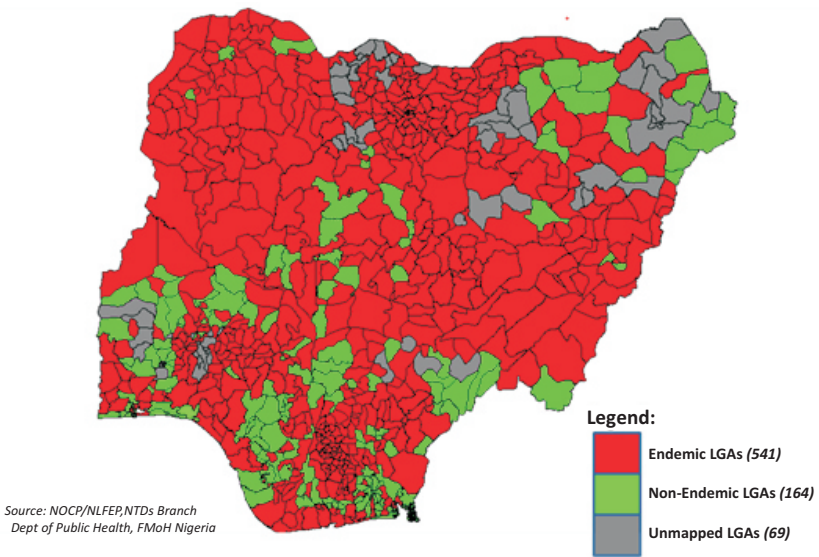


Figure : Lymphatic Filariasis Prevalence Map

## **1.2.2 Opportunities for co-implementation of Malaria and Lymphatic Filariasis programmes**

### ***Transmission of Malaria and Lymphatic Filariasis***

In Nigeria anopheles mosquitoes transmit malaria and lymphatic filariasis. They are wide spread in the country and constitute a significant factor in the distribution of malaria and lymphatic filariasis. Man is the only reservoir of both malaria and lymphatic filariasis. Transmission is all year round and associated with the environment and tropical climate that support mosquito breeding. Human behavior such as scant clothing and outdoor activities aimed at avoiding discomfort of the hot weather result in intense man-mosquito contact and subsequent infection with malaria and or lymphatic filariasis.

## **1.3 Rationale and Benefits of malaria and lymphatic filariasis co-implementation**

### **1.3.1 Rationale**

The rationale of Malaria-LF co-implementation is to harness available resources in a cost-effective manner for the control and elimination of the diseases.

It has been established that LLINs provide protection from the vectors that transmit both diseases. Similarly MDA with mectizan and albendazole helps in reducing anemia associated with both diseases. Both programmes will take advantage of an integrated communication and social mobilization messages (including BCC for LLINs and MDA). Moreover, integrated supervision, monitoring and evaluation will strengthen intervention delivery and track impact.

### **1.3.2 Benefits of malaria and lymphatic filariasis co-implementation**

The following benefits will be derived from Malaria-LF co-intervention:

- i. Efficient use of resources (vehicles, material and personnel)
- ii. Saves cost, time and effort through integrated delivery of commodities (LLINs, ACTs, mectizan and albendazole)

- iii. Synchronized health information system
- iv. Programmes complement each other

**Table : Milestones in-Lymphatic Filariasis co-implementation**

2004	<ul style="list-style-type: none"> <li>• Integrated LLIN/MDA pilot study in Kanke LGA, Plateau State</li> </ul>
2010	<ul style="list-style-type: none"> <li>• Malaria and lymphatic filariasis Household Survey in Plateau and Abia States</li> <li>• Mass LLIN distribution campaign in Plateau and Nasarawa States</li> </ul>
2011	<ul style="list-style-type: none"> <li>• Behaviour Change Interventions for malaria and lymphatic filariasis in Ebonyi</li> </ul>
2012	<ul style="list-style-type: none"> <li>• National Conference to stop the transmission of lymphatic filariasis and malaria in Nigeria.</li> <li>• Stakeholders meeting on Malaria LF co-implementation: setting up technical committee to develop guidelines for complementation</li> <li>• Development of guidelines for Malaria LF co-implementation</li> </ul>
2013	<ul style="list-style-type: none"> <li>• Development of Guideline for Malaria-LF co-implementation</li> <li>• Development of Behaviour Change Intervention for malaria and lymphatic filariasis in Plateau State</li> </ul>

#### 1.4 Malaria control and lymphatic filariasis elimination policy

Malaria and Neglected Tropical Diseases (NTDs) have policies which highlight the position of government as regards the implementation of programme activities. The policy on LF elimination is derived from the NTDs policy (since LF is a component of NTDs). These policies are set within the framework of the National Health policy.

The goal of the malaria policy is **“to give direction towards the achievement of the reduction by 50% malaria related morbidity and mortality in Nigeria”**<sup>2</sup> while that of the NTDs is that **“FMOH will lead and coordinate the integrated control of NTDs...”**<sup>3</sup>

The FMOH has continuously promoted co-implementation of interventions as well as resource-sharing between programmes including Malaria-LF co-implementation.

<sup>1</sup>. B.G. Blackburn, A. Eigege, H. Gotau, G. Gerlong, E.Miri, W.A. Hawley, E. Mathieu, and F. Richards (2005). *Successful integration of insecticide – treated bed net distribution with mass drug administration in central Nigeria. AM JTM & Hyg 75(4) 650-655*

<sup>2</sup> FMOH. National Malaria Control Policy. September, 2012

<sup>3</sup> FMOH. National Policy of Neglected Tropical Diseases. February, 2010

<sup>4</sup> FMOH. National Health policy

## 2. Goal and Objectives

### 2.1 Goal

The goal of this document is to set the standard for the co-implementation of malaria and lymphatic filariasis interventions.

### 2.2 Objectives

The objectives of these guidelines are to set the standards for joint:

- i. Planning and coordination
- ii. Logistics and Logistics Supply Information Management (LSIM)
- iii. Delivery of interventions (LLINs and MDA)
- iv. Training and re-training
- v. Malaria and lymphatic filariasis morbidity management (diagnosis, treatment and referral)
- vi. Supervision, monitoring and evaluation and operational research
- vii. Surveillance at malaria and lymphatic filariasis sentinel sites
- viii. Communication and social mobilization including integrated Behaviour Change Communication to support implementation

### 3. Strategic Direction for Malaria and Lymphatic Filariasis Co-Implementation

Nigeria joined the league of African countries to ensure the realization of the 2001 Abuja declaration to reduce by half the burden of malaria by the year 2010. This is to be achieved through the massive scale-up of interventions through mass LLINs distribution campaigns, Intermittent Preventive Treatment of malaria in Pregnancy (IPTp), prompt diagnosis and treatment with effective medicines, in-door residual spraying (IRS) and larval source management.

Significant progress has been made in the implementation of all planned interventions, resulting in the reduction of observed malaria prevalence pattern in the country (Fig 3).With respect to lymphatic filariasis, the country's plan of action is to eliminate the disease through the massive scale-up of MDA in areas where it is feasible. In areas where *Loa loa* is co-endemic with onchocerciasis, the use of LLINs alone will be intensified.

The strategic direction for intervention against both diseases is to combine the effect of individual programme activities with respect to planning and coordination, logistics and logistics supply information management (LSIM), delivery of interventions (LLINs and MDA), training and re-training, Malaria-LF morbidity management (diagnosis, treatment and referral), supervision, monitoring and evaluation and operational research, surveillance at malaria and lymphatic filariasis sentinel sites and communication and social mobilization including integrated behaviour change communication to support implementation.

## 4. Planning and Coordination

### 4.1 Planning

The National and State teams will carry out macro planning while LGAs, FLHFs and community implementation teams will carry out micro planning.

Federal and State Ministries of Health together with partners will develop annual plans of co-implementation activities while LGAs, FLHFs and communities will plan details of intervention deliveries.

Planning will be done at joint meetings of implementers of both programmes.

### 4.2 Coordination

The two programmes have robust partnership structures. Partners will harmonize activities at all levels. The Federal and State Ministries of Health will lead and coordinate all co-implementation activities at the national and State levels respectively. The LGAs will coordinate the process of intervention delivery by the communities. Front Line Health Facilities (FLHFs) will serve as hub for community service delivery. The partners will support the coordination process at all levels (fig 5).



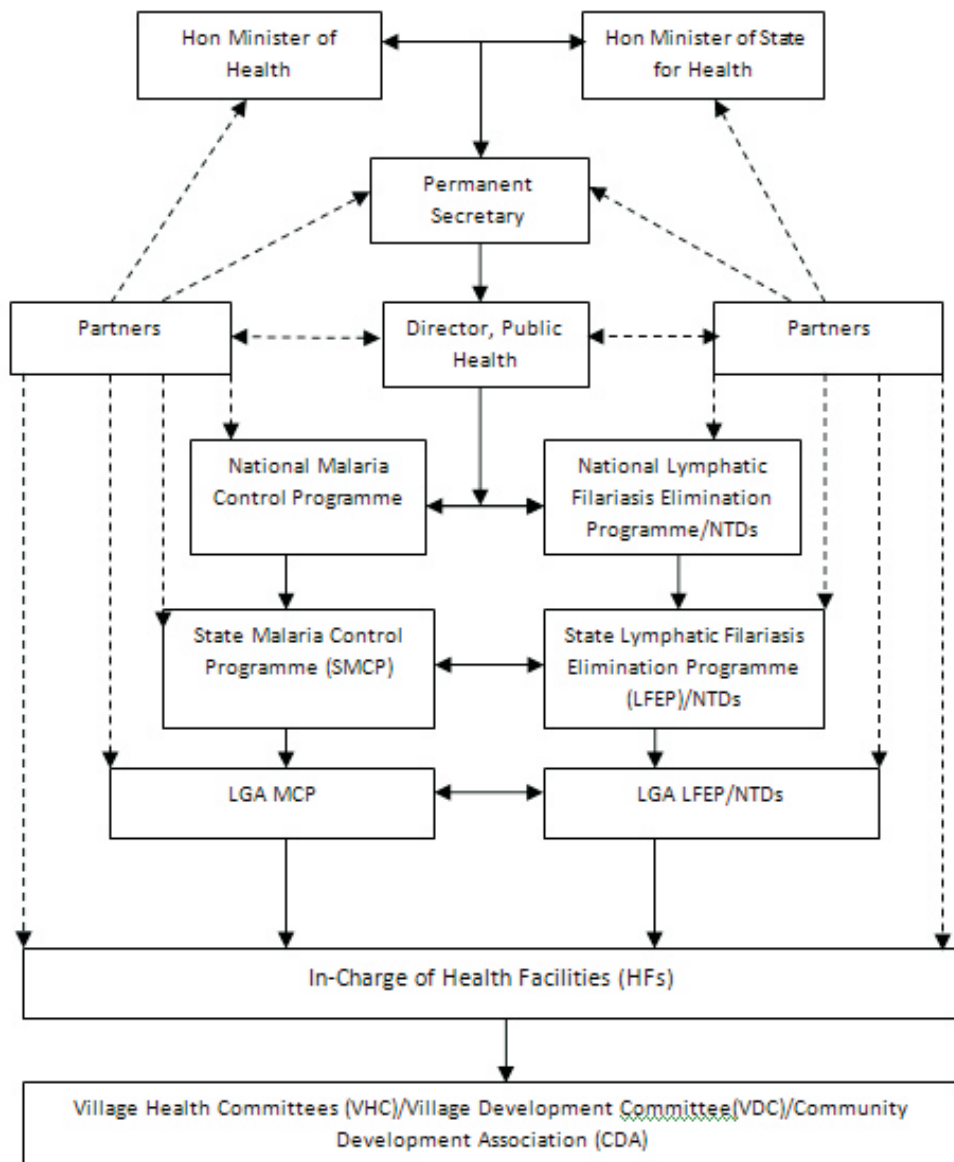


Figure : Coordination Framework

## 5. Logistics and Logistics Supply Information Management (LSIM)

### 5.1 Logistics Planning

A successful commodity distribution depends on effective logistics. Logistics is essentially concerned with the transport and storage of large volume of commodities along the supply chain. with proper control, accountability and transparency. Therefore, it is important sufficient storage and transport capacities are provided at all levels.

Implementers at all levels will jointly and carefully plan logistics. Personnel that will carry out specific tasks should be identified at this stage. Specify time it should be done, with respect to commodities, methods of conveyance, warehousing and such other important directives.

**Table : Typical logistics process**

S/N	Logistic Process	Partner Responsible
1	Needs assessment and quantification	Communities, LGAs, States, Federal and Partners
2	Procurement and placement of orders	Federal, States, LGAs, Partners
3	Obtain waiver on taxes and tariffs	Federal
4	Order tracking	Federal, States, LGAs, Partners
5	Clearance	Federal and Partners
6	Transport planning; ports and inland	Federal, States, LGAs, Partners
7	Store assessment, verification and rehabilitation	Federal, States, LGAs, Partners
8	Warehousing and storage; safety and security of commodities during transportation and storage	Federal, States, LGAs, Partners and communities
9	Stock inventory and verification	Federal, States, LGAs, Partners and communities

During logistics planning, the monitoring of progress against the timeline will be done personnel at the various levels. The use of tracking tools will be a crucial monitoring function.

However, the best plans may sometimes face unforeseen challenges during operationalization. Implementers should be oblivious of this and plan to respond to such unforeseen circumstances.

## **5.2 Procurement of Goods and Services**

For accountability and transparency, the procurement and ordering processes must be duly documented. A procurement file must contain all relevant documents: Requests for Quotation, specifications and quantifications, Tender documents, Offers and Quotations, Minutes of local purchase order (LPO), meetings, etc.

## **5.3 Commodity Management Assessment (CMA)**

The purpose of a CMA is to measure the level of accountability and transparency achieved in the management and distribution of commodities.

Individuals responsible for CMA will verify the existence of clear and complete “audit trails” using a set of documents (waybills, stock sheets, tally sheets, inventory treatment registers). Each and every step of the transport, storage and distribution process should be documented. All supply chain documents should be properly filed.

## **5.4 Security and Safety**

Planning for the security of the commodities is one of the requirements of accountability. It is therefore important to take measures against theft, damage, diversion, leakage and exposure to hazards during transport and storage.

## **5.5 Budgeting**

The cost of logistics activities, personnel and materials must be budgeted at all levels using standardized budgeting tools (budget templates). This will simplify the budgeting process and ensure that budgets relate to programme activities.

## 5.6 Logistics Supply Information Management

Both programmes will share information on logistics process. Routine information on malaria and lymphatic filariasis morbidity, treatments and management will also be documented and shared at all levels.

## 6. Delivery of Interventions

Combined delivery of interventions is one of the core values of the co-implementation of malaria and lymphatic filariasis programmes. Nigerian communities are experienced in participatory interventions including multiple service delivery and have community-owned resource persons (CORPs) such as CDDs and RMCs. CORPs will carry out co-implementation activities at the community level.

### 6.1 Distribution of long lasting insecticide nets and Mass Drug Administration (MDA)

Distribution of LLINs and MDA has been proven to be co-implementable in Nigeria<sup>7</sup>. The FMOH and partners has adopted and effectively scaled up LLINs distribution. Lessons learned from these will be applied for MDA and LLIN distribution.

- i. CORPs will take advantage of one intervention to carry out the second intervention such as LLINs distribution during house to house MDA
- ii. Where house-to-house distribution is not feasible such as in urban settings, central point of distribution is recommended.
- iii. Pregnant women and mothers of under-5 children attending antenatal and postnatal clinics will be provided with LLINs and other malaria and lymphatic filariasis intervention commodities.
- iv. Maternal, new-born and child health (MNCH) weeks will be used as a platform for the delivery of interventions.
- v. Where *Loa loa* infection is present and onchocerciasis is non-endemic or hypo-endemic), MDA will be carried out with albendazole given alone twice per year.
- vi. Where *Loa loa* and onchocerciasis are co-endemic, LLINs should be given.

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<sup>7</sup>Blackburn...

## **6.2 Indoor Residual Spraying (IRS)**

State and LGA malaria and lymphatic filariasis focal persons including FLHF staff will sensitize community leaders on IRS.

Implementation of the IRS will be carried out by trained CORPs.

## **6.3 Larval Source Management**

Larviciding and environmental management are the two interventions in larval source management. The interventions have joint beneficial impact in the control of malaria and the elimination of Lymphatic Filariasis in the sense that the two targets the mosquito and controls the larval source.

- i. Community members will identify larval sources for larviciding.
- ii. State and LGA focal persons will sensitize communities to carry out environmental management activities.

## **6.4 Home management of malaria, LF morbidity management and case reporting**

- i. State and LGA focal persons will train CORPs on malaria and lymphatic filariasis case detection
- ii. CORPs will provide appropriate treatment for malaria within the context of integrated case management and provide health education for LF morbidity management.

## **6.5 Management of Side effects and adverse events**

CORPs will provide pre-treatment information and education about likely side effects and adverse events such as headache, fever, rash, abdominal pain, vomiting or diarrhea. The information should include who to contact when these occur.

CORPs will provide counseling and referral to the nearest health facility or health personnel.

## 7. Training and Re-training

Training at all levels will be integrated. . The integrated training will be cascaded from the national, States, LGAs, FLHFs to the community.

An integrated training manual covering all co-implementation activities will be used.

## 8. Malaria and Lymphatic Filariasis Morbidity Management (Diagnosis, Treatment and Referral)

A standard protocol for co-management of malaria and lymphatic filariasis morbidity will include diagnosis, treatment and referral at the community level using the CDI strategy

### 8.1 Diagnosis

Community implementers will be trained to recognize, detect and report signs of malaria morbidity and elephantiasis using their common symptoms

#### Box : Diagnosis of Malaria and Lymphatic Filariasis

##### Malaria

- Rapid Diagnostic Tests: Use approved kits for antigen detection at the health facility and by community Role Model Care Givers (RMCG)
- Microscopic examination of blood

##### Lymphatic filariasis

- Elephantiasis
- Rapid Diagnostic Tests using Immunochromatographic Test (ICT)
- Microscopic examination of blood

### 8.2 Treatment

Treatment of both malaria and lymphatic filariasis will be carried out at the health facility and community levels. Implementers will be trained to give appropriate medicines for malaria and lymphatic filariasis using approved treatment procedures for each disease.

#### Box : Treatment and Management

##### Malaria

- Observe exclusion criteria
- Use ACT
- Comply with dosage criteria: severity, age, weight, pregnancy status
- Frequency: Every episode

##### Lymphatic Filariasis

- Observe exclusion criteria
- Use Ivermectin and Albendazole
- Comply with dosage criteria: age, weight, pregnancy
- Frequency: annual MDA
- Hygiene management of complications: washing and cleaning of affected parts, wearing of protective footwear



### 8.3 Referral

Refer all severe adverse events, non-response cases and severe malaria to the nearest health facility or health personnel for management.

## 9. Supervision, Monitoring and Evaluation and Operational Research

Scheduled monitoring, and supervision as well as operational research will drive co-implementation activities.

### 9.1 Supervision

Co-supervision of both programmes using an integrated supervisory checklist is critical to meeting objectives of Malaria-LF co-implementation.

Programme activities will be supervised at the community, LGA, State and Federal levels according to operational channels of the implementing agency.

The standard checklist will contain the indicators that are being supervised.

#### Box : Checklist for supervision

- Compliance with intervention requirements
- Quality of work done
- Reporting and Record keeping
- Usage of tools
- Challenges and how they were resolved
- Co-delivery of services
- Support provided by the supervisor for resolving observed challenges
- Follow up on issues to be addressed during next visit

### 9.2 Monitoring

Monitoring will be jointly conducted using an integrated monitoring tool for both malaria and lymphatic filariasis. Monitoring shall be routine (during the course of other activities) as well as time-specific (as a scheduled activity) and both internal (carried out by the project staff), and external (involving non-project staff).

Routine monitoring will be carried out at the level of health area where the health officer in charge will be required to conduct on-the-spot-check for performance indicators on both programmes.

Scheduled and time-specific monitoring will be done at the level of the LGA, State and Federal Ministry of Health using check-list.

The LGA team will carry out monthly monitoring while the States and FMOH will adopt quarterly schedule respectively.

The data collected will be used for reviewing the extent (adequacy, timeliness, effectiveness) to which planned activities are being implemented.

In addition to programme-specific indicators, the following indicators of co-implementation will be measured during the monitoring process.

### **Box 1: Monitoring indicators**

- The number and proportion of joint meetings
- CSM including BCC activities
- Training and retraining
- Sentinel sites per geopolitical zone
- Challenges identified that have been subjected to operational research review
- Supervision, monitoring and evaluation
- Delivery of LLIN and MDA to defined areas

Where appropriate, electronic data capture will be used for collection of monitoring data.

## **9.3 Evaluation**

All implementation projects will collect and store baseline data with the FMOH. Standardized evaluation tools will be developed and adopted for use. The outcome and impact of programme activities (input and processes) will be compared with baseline indicators. The impact of co-implementation will be determined.

An external team will carry out programme evaluation. FMOH in collaboration with partners will constitute evaluation team for an annual evaluation and review. The evaluation reports will be used for conducting a stakeholders meeting to review progress, plan the subsequent phase (scaling up, expansion or alteration) and for identifying operational and implementation research problems that will need to be addressed.

## 9.4 Operational research

Operational research is a short within programme collation of evidence for resolving an immediate operational problem while implementation research is a programme-wide need for knowledge before expansion or up scaling.

Operational research will be an integral part of co-implementation. Programmes will identify challenges to implementation at the operational level. Operational challenges will be resolved using evidence-based research.

Programmes will collaborate and take advantage of universities, research and training institutions for conducting operational research and resolving operational issues.

Product of operational research must be shared with the FMOH for review and possible absorption to policy and guidelines.

Partners are encouraged to collaborate with institutions to identify and support implementation research that will contribute to the accomplishment of programme goal.

## 10. Surveillance at Malaria and Lymphatic Filariasis Sentinel Sites

Where feasible, malaria and lymphatic filariasis will share the same sentinel sites. Sentinel sites will be used for collecting surveillance data.

### 10.1 Required surveillance data

Routine information on malaria and lymphatic filariasis will include:

- i. Number of children who present with symptoms of uncomplicated malaria and or individuals with episodes of lymphatic filariasis attack.
- ii. Number of children (and or individuals) who received antimalarial medicines and or individuals with episodes of lymphatic filariasis morbidity attack that reported it to the health worker or joined a lymphatic filariasis support group.
- iii. Number of children (and or individuals) who completely recovered after malaria treatment and or individuals that recovered fully from episodic attack of Lymphatic Filariasis
- iv. Number of functional LLINs in Households
- v. Number and proportion of communities implementing IRS
- vi. Number and proportion of HHs sprayed using IRS
- vii. Number and proportion of HHs with LLINs
- viii. Number and proportion of population that slept inside the net the previous night
- ix. Number and proportion of population protected by IRS
- x. Number and proportion of communities implementing Larviciding
- xi. Number and proportion of areas covered by Larviciding
- xii. Number and proportion of population treated with mectizan and albendazole
- xiii. Number and proportion of communities treated with mectizan and albendazole

- xiv. Number and proportion of drugs supplied, used and unused (wasted, expired etc)
- xv. Number and proportion of hydrocele cases and surgeries performed
- xvi. Number and proportion of lymphodema cases and those managed
- xvii. Number of children (and or individuals) that are referred.
- xviii. Number and proportion of people who reported mild and severe adverse events
- xix. Number and proportion of people who refuse treatment
- xx. Number and proportion of trained HF Staff (Records Officers or designated officers) in each health facility
- xxi. Number and proportion of communities with CORPs within the area
- xxii. Number and proportion of trained CORPs
- xxiii. Number and proportion of time of data retrieval by the LGA official at the agreed period

## **10.2 Reporting and dissemination strategies**

A report writing format will be used at various levels of implementation. Dissemination will be done at different levels. At the national level, it will be through the following:

- i. News letter, Local Journals/ editorials, magazine columns/Advertorial/Features, NMA, National Assembly, states magazines
- ii. Conduct one national Dissemination meeting at Abuja
- iii. FMOH and partners will conduct a joint national annual dissemination meeting
- iv. FMOH and partners will conduct an international level dissemination annually.
- v. FMOH will disseminate reports through websites, newsletters and partners' forum

# 11. Communication and Social Mobilization

Communication and social mobilization including BCC will be used for joint advocacy, mobilization, and sensitization and health education.

## 11.1 Communication

Communication is the sharing of information and messages to create awareness of about available interventions on malaria and lymphatic filariasis programmes and how to access them.

Programme officials will collaborate with partners to disseminate messages regarding intervention activities through channels that are appropriate for the audience.

Programme officials will take advantage of non-traditional channels at the community level such as drama, festivals, and other gatherings for promoting desired action and behaviour in small focal areas.

Messages should be conveyed in schools, worship centres, markets, entertainment and recreation area places, town halls and other places where the required audience is likely to be in large number.

Programme officials should however use TV, radio, talk shows, worship centres, markets and other public gatherings where wide reach and urban populations is the goal.

Flipcharts, posters, leaflets, tee- shirts, drama, songs and poetry should be used as vehicle for conveying messages.

## 11.2 Social Mobilization

Strategies for social mobilization will include the use of communication channels such as announcers, schools, drama and celebrities.

Social mobilization techniques will be used for promoting ownership of process and outcome. Programme officials will negotiate the participation of key stakeholders at the onset and involve. The eventual aim is to ensure to promote co-implementation at all levels.

Programme officials and partners will carry out advocacy visits to policy-makers, influencers of policies and decisions at all levels of implementation.

### **11.3 Behavioural, Change Communication**

The community-based behavior change communications will be used to promote malaria and lymphatic filariasis interventions.

Strategies will be directed at promoting behaviours that lead to reduced man-mosquito contact, compliance with treatment procedures.

CORPs will conduct visits to homes as well as organize events at the community level that are targeted at demonstrating appropriate behaviors in relation to interventions such as hygiene management of LF morbidity, and LLIN use within the house.

CORPs will update household list and households on malaria and lymphatic filariasis interventions in the community.

CORPs will negotiate the hosting of community events where desired promotional messages are conveyed.

Corps will also use the opportunity provided by festivities such as Christmas, new yam festivals, Sallah, and the numerous other festivals that are found all over Nigeria.



## Annex 1:

### Common Vectors, Mode of transmission, Management and Strategies for control/elimination

	Malaria	Lymphatic Filariasis
Vectors	Female <i>Anopheles gambiae</i> , <i>An funestus</i> ,	<i>Female Anopheles spp.</i> , <i>Culex sp.</i>
Transmission	Mosquito bite during blood meal	Mosquito bite during blood meal
Management	Both uncomplicated and severe malaria	Lymphodema case by simple hygiene Hydrocele case by surgery
Strategies for Control/ Elimination	Prevention using Integrated vector management such as use of LLINs, IRS, Larval source management and effective case management supported by BCC, M& E	Prevention by annual MDA and vector control Management of case

## Annex 2:

### **Additional documents for further reading**

- i. Distribution of long lasting insecticidal nets through mass campaign under the universal model: an implementation guide for National Malaria Control Programme and Partners: September, 2009
- ii. National policy of Neglected Tropical Diseases: February, 2010
- iii. National Malaria Control Policy: September, 2012
- iv. Guidelines for Integrated Vector Management in Nigeria: July, 2007
- v. National Policy on Integrated Vector Management in Nigeria: July, 2007
- vi. Guidelines on routine/continuous Distribution of long last insecticidal nets in Nigeria
- vii. Nigeria Master Plan for Neglected Tropical Diseases (NTDs): 2013 -2017: 22 March, 2013

## Annex 3:

### List of Contributors

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