NATIONAL STRATEGIC PLAN FOR MALARIA CNTROL IN SIERRA LEONE 2004 - 2008

Insert Photo here
(The President performing RBM function or pregnant woman/child sleeping under ITN or map of Sierra Leone)

MINISTRY OF HEALTH AND SANITATION

FREETOWN, SIERRA LEONE

MARCH 2004

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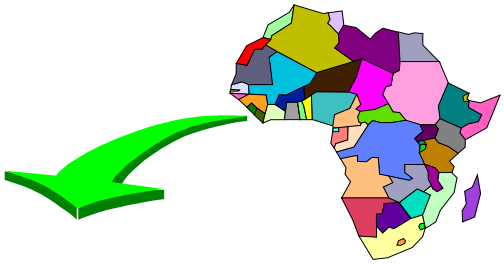


SIERRA LEONE

FOREWORD

Malaria burden continues to be a major public health problem with respect to illness and deaths. It is also a cause and consequence of poverty and hinders socio-economic development. Every Sierra Leonean is at risk of contracting malaria just like most countries in sub-Saharan Africa. The increasing resistance to hitherto effective and relatively affordable antimalarial drugs compounds the problem.

Malaria control activities, before Roll Back Malaria (RBM), were perceived as solely a health issue and therefore within the exclusive mandate of the sector. With RBM initiative launched, the importance of partnership and collaboration with other sectors are emphasized.

During a colourful ceremony, RBM was officially launched in Sierra Leone by the Vice-President in 2001. Since then, landmark achievements have been in the area of policy formulation, strategy development, partnership strengthening, delivery of effective interventions, among others. In line with the Abuja Declaration, to which Sierra Leone is signatory, tax and tariffs have been waived on insecticides treated nets and anti-malarial drugs. Free treatment has been instituted for vulnerable groups such as children and pregnant women who attend public facilities. Advocacy for RBM implementation has been facilitated on a yearly basis during the Africa Malaria Day commemoration. We have actively promoted through RBM, health systems development through its collaboration with the Integrated Disease Control and Surveillance (IDS), Integrated Management of Childhood Illnesses (IMCI) Strategy and Maternal and Child Health programmes.

Using available evidence and scientific process, guided by extensive consultations, the Ministry of Health and Sanitation of the Government of Sierra Leone has put this Strategic Plan document together in collaboration with Partners and key stakeholders.

This plan is expected to give direction and guidance to government, partners and key stakeholders in the implementation of Malaria control in Sierra Leone to roll back malaria and roll in development.

Name and Signature

The Hon Minister for Health and Sanitation

EXECUTIVE SUMMARY

Sierra Leone is a signatory to the Abuja Declaration of April 2000 to roll back malaria in Africa, which challenged all member States to meet the following set targets by 2005:

At least 60 percent of those affected by malaria have access to prompt, appropriate, adequate and affordable treatment.

At least 60 percent of those at risk, especially pregnant women and children under five, benefit from the most appropriate combinations of personal and communal protection, including ITNs.

At least 60 percent of pregnant women at risk, especially those at first pregnancy, have access to intermittent presumptive treatment (IPT).

Since the Declaration, and the launching of Roll Back Malaria Initiative in Sierra Leone in 2001, the following achievements have been accomplished through the management and coordination of the National Malaria Control Program (NMCP) and partners. These include: development and launching of Malaria Policy Document (April 2000); establishment of the Roll Back Malaria taskforce, commemoration of Africa Malaria Day, since 2001, conduction of antimalarial drug efficacy studies followed by consensus meeting on drug policy review, development of Treatment Guidelines, all of which have been approved as policy documents; approval of tax waiver on mosquito nets, insecticides, antimalarial drugs, effective 2003; Desk-Top Analysis (2001); development of draft Framework for National Strategic Plan for Malaria Control, and the Situation Analysis (2004).

The process of developing the Strategic Plan involved extensive consultations with partners and key stakeholders; collection and analysis of available evidence such as RBM Desktop Analysis, among other relevant documents. A Plan development workshop was held where partners and key stakeholders including the District Medical Officers (DMOs) and representatives of Community Based Organizations (CBOs) made inputs to produce a draft. The completion of the Plan was informed by additional information from the RBM Situation Analysis during a follow-up Plan Review workshop. In a Partners/Stakeholders meeting, consensus was reached on all key interventions as stated in the Plan. These include:

Disease Management: The aim of disease management is to ensure early diagnosis and prompt treatment through improved access to effective antimalarial drugs. The quality of care in public and private health facilities will be improved.

Multiple Disease Prevention (including Insecticide Treated Nets, Intermittent Preventive Treatment and vector control): Multiple disease prevention is to reduce malaria morbidity in the general population with a focus on the under fives and pregnant women through increasing access and use of ITNs and IPT for pregnant women.

Advocacy; and Information, Education and Communication: This is to promote and encourage positive health practices with regards to malaria control in the communities; and to secure full commitment and support of policy, decision makers and other relevant stakeholders to facilitate resource mobilization for malaria control.

Partnership Strengthening and Programme Management Support: The overall goal of this intervention is to improve performance of the NMCP. The private and informal sectors will be encouraged among other partners to play increasing roles in RBM.

Operational Research: This will provide the necessary scientific evidence for timely decision making to improve services provided. Research agenda relevant to each strategic approach will be identified in collaboration with research institutions and other RBM partners.

Monitoring & Evaluation: This is necessary at all levels, especially at national and district levels to ensure proper implementation of activities, timely identification of problems to facilitate necessary actions to be taken among other things. Periodic evaluation of the impact of the interventions will be conducted.

The Plan also details the estimated cost of implementing the various interventions over the five-year period (2004-2008).

ABBREVIATIONS

ACTs	Arteminisin-based Combination Therapy
ADB	African Development Bank
ADC	Area Development Committee
BFVs	Blue Flag Volunteers
CHO	Community Health Officers
CORPs	Community Oriented Resource Persons (e.g. TBAs, BFVs, etc)
CMs	Community Motivators
CHRISTAG	Christian Action Group
CHWs	Community Health Workers
EHOs	**Environmental Health Officers**
ISLAG	Islamic Action Group
DHMT	District Health Management Team
DPC	Disease Prevention and Control
DPT3	Diphteria Pertussis and Tetanus 3
EDCU	Endemic Diseases Control Unit
EHO	Environmental Health Officer
EU	European Union
GOSL	Government of Sierra Leone
HRS	Health Systems Research
HIS	Health Information System
HIPIC	Highly Indebted Poor Countries
IDP	Internally Displaced Person
IEC	Information, Education and Communication.
IHSIP	Integrated Health Sector Investment Project
IMCI	Integrated Management of Childhood Illness.
IPT	Intermittent Presumptive Treatment
INGO	International Non-Governmental Organisation
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Net
KAP	Knowledge, Attitude and Practice
MCH/EPI	Maternal and Child Health/Expanded Programme on Immunization
MICS	Multiple Indicator Cluster Survey
MOH&S	Ministry of Health and Sanitation.
NEPAD	New Economic Partnership for Africa's Development
MRC	Medical Research Centre
NHMIS	National Health Management and Information System
NRC	National Research Committee
NGO	Non-Governmental Organisation
NMCP	National Malaria Control Programme
NNGO	National Non-Governmental Organisation
PMS	Patent Medicine Sellers
PHC	Primary Health Care
PHU	Peripheral Health Unit
PRSP	Poverty Reduction Strategy Paper
RBM	Roll Back Malaria

RBMTC	Roll Back Malaria Technical Committee (formerly RBM Task Force)
RBMPC	Roll Back Malaria Partnership Committee
DHMT	District Health Management Team
RH/FP	Reproductive Health/Family Planning
SMCs	Social Mobilization Committees
TBA	Traditional Birth Attendant
TT2	Tetanus Toxoid 2
TOR	Terms of Reference
UNDP	United Nations Development Programme
UNFPA	United Nations Fund For Population Activities
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development
UK-DFID	United Kingdom- Department for International Development
VDC	Village Development Committees
VHW	Village Health Worker
WHO	World Health Organisation
WB	World Bank

INTRODUCTION

Malaria disease burden

Malaria continues to be a major global health problem, with over 40% of the world's population at risk - more than 2400 million people exposed to varying degrees of malaria risk in some 100 countries. Over one million people die annually from malaria and 70% of these deaths are among the children under-five years. Unfortunately, 90% of these live in Sub – Saharan Africa.

Malaria is endemic in Sierra Leone. It is presently the leading cause of morbidity and mortality amongst children under five years of age. It is the first on the list of Government priority diseases. The entire populace is at risk of developing the disease accounting for over 40.3% of outpatient morbidity, but the most vulnerable groups include under-five year old (U5) children, pregnant women, refugees and returnees. It is a disease of poverty as a cause and a consequence. Malaria is a major threat to the socio-economic development of the country with an estimated 7-12 days lost on the average per episode of malaria. The increasing resistance to hitherto effective and relatively affordable antimalarial drugs compounds the problem.

Several control efforts, plans and strategies such as case management, minimal vector control, among others, have been used to address the malaria problem and coordinate control efforts of various partners. The Ministry of Health and Sanitation (MOHS) with technical support from WHO in the context of the health action plan, established the National Malaria Control Programme in 1994 within the Disease Prevention and Control Division. Before 1994, there was no programme to coordinate malaria control activities.

In response to the high morbidity and mortality among children, the MOHS has endorsed the Integrated Management of Childhood Illnesses (IMCI) programme in the country, and several senior officers trained at international level. There is also a link between NMCP and several other related programmes such as Integrated Disease Surveillance and Response (IDSR) Reproductive Health, Expanded Programme on Immunization / MCH, Nutrition, School Health among others.

Developing a national strategic plan to control malaria in an integrated disease control approach is a right step in the right direction for Sierra Leone to optimise the use of available resources.

Process of developing the Strategic Plan:

Shortly before the formal launching of RBM in Sierra Leone, a Desktop review was conducted to give a preliminary assessment of the malaria situation in the country. Thereafter a draft Framework for National Strategic Plan for Malaria control in Sierra Leone was developed. Recently, a district self-assessment and community assessment using the WHO Guideline was conducted by the Ministry of Health and Sanitation.

As part of the finalisation process, a residential workshop was organised for all partners and stakeholders to develop the Strategic Plan for malaria control in the country. The completion of the Plan was informed by additional information from the RBM Situation Analysis during a follow-up Plan Review workshop. In a Partners/Stakeholders meeting, consensus was reached on all the stated key interventions.

COUNTRY PROFILE:

Geographic location and Climatic information:

Sierra Leone is located on the West Coast of Africa, between latitude 7-10^{o}North and longitude 10 – 13^{o} West. It is bounded by Guinea on the North and East, and Liberia on the South. The Atlantic Ocean forms a beautiful coastline to the south and west of the country.

The country has a varied relief ranging from coastline swamps, through inland swamps and rain forest to one of the highest mountains (Bintumani is about 2200m) in West Africa. The vegetation is mainly secondary palm-bush, interspersed with numerous swamps that are mostly cultivated for rice. These swamps provide ideal breeding places for the Anopheline vectors of malaria. Moreover, the capital city Freetown has several mangrove swamps, which provide the breeding sites for *Anopheles melas* mosquitoes, which is one of the major vectors of malaria besides *gambiae* and *funestus*.

The country has a typical tropical climate with temperature ranging from 21^{o}C to 32^{o}C with a mean daily temperature of 25^{o}C. It has two major seasons; wet season (May to October) and dry season (November to April) with heavy rains in July/August. It has an average rainfall of about 3200mm annually. Relative Humidity is high ranging from 60 to 90%. (Annual Statistic Digest 2001)

Demographic and Health information:
Basic demographic data including vital statistics are as shown in Table 1 below. It also shows key health indicators reflecting limited access to qualitative health care services. These are consequences of the complex emergencies the country has found itself over the years. Remarkable improvement is expected in the years ahead as the country moves into recovery phase and progressively into development phase.

Socio-economic information:
The Economy of Sierra Leone is built around two major activities – Agriculture and Mining. About 80% of its population depends largely on subsistence farming and fishing for a livelihood. Rice, Palm oil, cocoa, ginger are the mainstay of the development of the economy from 1950 – 80's. Rice accounts for about 30-35% of the GDP. Export minerals like Diamonds, Bauxite, Rutile, Iron Ore and Gold account for more than 70% of the country's total foreign exchange earnings. In the 1950's up to the 70's, diamonds and iron ore were the factors responsible for growth of the economy.

Sierra Leone with a liberal economy has suffered prolonged deterioration and accompanying low standards of living due to war related activities since 1991 and has caused extensive damage to an already inadequate economic and social infrastructure leading to high unemployment levels and declining per capital incomes. The extent of poverty among the population, particularly the rural segment, is manifested in the Human Development Index 2002, which ranks the country as one of the least developed nations in the world.

Allocation for health in the National budget still remains less than 7%. However, the Ministry of Health current expenditure as % of GDP in 2001 was 1.7%. Programmes in the country to alleviate poverty include:

- NaCSA (National Commission for Social Action)
- Social Action for Poverty Alleviation (SAPA) programmes,
- International Monetary Fund (IMF) approved an economic programme in the context of the Emergency Post Conflict Assistance Facility in December 1999.
- The World Bank's Economic Rehabilitation and Recovery Credit to assist Government in restoring protective and economic security, and supported the Integrated Health Sector Investment Project (IHSIP) has metamorphosed into Health Sector Reconstruction and Development Project.

National Development Initiatives

- Poverty Reduction Strategy Paper (PRSP)
- Highly Indebted Poor Countries (HIPIC)
- New Economic Partnership for African Development (NEPAD)

Table 1: Main demographic features and Health indices of Sierra Leone:

Indicator	**Latest Estimated Value** (See sources*)
Population: Total	5.399 million (projected for 2003)
Population: under five years	888,277 (17.1%)
Population: pregnant women	250,808 (4.8%)
Population: Women in Child Bearing Age Gp.	1,254,038 (24.1%)
Female population	50.7%
Male population	49.3%
Population growth rate	3.21%
Crude birth rate	45 per 1000 population (W. Africa av. =34/1000)
Crude death rate	22 per 1000 population (W. Africa av.=11.5/1000)
Average annual growth rate	2.3%
Total fertility rate	5.94 birth/woman
Infant mortality rate	170 /1,000 live births
Under five mortality	286/1,000 live births
Maternal mortality rate	1800/100,000 live births
Ante-natal Care coverage	68.0% pregnant women received at least one consultation
Deliveries attended by trained personnel	41.7%
Birth weights below 2.5kg	52.5%
Underweight prevalence in U5 children	27.2%
Stunting prevalence U5 children	33.9%
Wasting prevalence in U5 children	9.8%
Malaria treatment in U5 children	60.9%
ITNs usage by U5 children	1.5%
Use of Oral Rehydration Therapy	86.1%
Exclusive Breastfeeding (0-4mths children)	2.4%
Complementary breastfeeding (4-9mths children)	52.5%
Iodized salt consumption	23.4% of Households
Immunization rates in 12-23mths children	DPT: 45.5%; Measles: 61.7%; TB: 61.2% and Polio: 72.8%
Neonatal TT immunization of pregnant women	57.7%
Contraceptive Prevalence rate (modern methods)	3.9%
Access to basic health care (actual)	38%
Urban dwellers	40.2%
Rural dwellers	59.8%
GDP per capita	USD 142
Life expectancy at birth	45 years
Literacy rate	31.4%

***Sources:** Annual Statistical Digest – Sierra Leone (GOSL, CSO – 2001); The World Fact book 2002; MICS Survey 2001; The WB document HSRDP Appraisal and MOH Information Sheet to refine data

Social Infrastructures:

In the last two years since the country had a stable peace, the education sector has been strengthened. The Ministry of Education recorded in 2001 about 2,704 primary schools (both private and government assisted schools), 246 Secondary schools, 6 teacher colleges, and 1 University, 174 technical and Vocational Institutes.

Female literacy level is 19%. There are many NGOs and female groups promoting the education of the girl child in the country. English is the National language in the country.

Media coverage is quite good, as radio stations have been established in all the four regions. TV coverage is available in the Western Area and part of the Southern province. Most of the houses in the capital are modern constructions some with window nettings while in the rural setting most of the houses are made of mud and zinc with no nets on their windows.

The Health Care System:

Goals and objectives of the health sector: According to the National Health Policy, the overall goal of the health sector is to maintain and improve the health of all Sierra Leoneans resident within the country. The Government of Sierra Leone is committed to pursing such a goal in an equitable manner. It will work towards ensuring that all citizens have access to basic health care. It has special responsibility to ensure the health of those citizens who are particularly vulnerable as a result of poverty, the results of conflict, gender or specific health problems. The Government of Sierra Leone also has responsibilities for ensuring the provision of adequate public health services including sanitation for food safety, and for specific communicable diseases.

National Health Priorities: These have been set on the basis of a number of criteria, namely: the severity of the disease in terms of its condition to the overall burden of disease in the country; distribution of the health problem within the country as a national problem; feasibility and cost-effectiveness of interventions concerning the health problem; Public expectations concerning the problem; and Compliance with international regulations.

On the basis of these criteria, **malaria ranks number one** among the current national priority health problems. Others are HIV/AIDS, TB, Reproductive health, including maternal and neonatal mortality, Sexually Transmitted Infections (STIs), Acute Respiratory Infections, Childhood immunisable diseases, Nutrition-related disease, water and sanitation-borne diseases, epidemic prone diseases including Lassa fever and Yellow fever, non-communicable diseases and mental health disorders.

Technical policies and guidelines exist for a number of these health priorities, which set specific objectives, targets, and strategies and where appropriate treatment protocols. Additional technical policies will be developed in each of the remaining priority areas and the existing ones updated as necessary.

Health care delivery: There is a strong history of Primary Health Care (PHC) within the health sector of Sierra Leone. The Government remains committed to this approach with an emphasis on primary care services and prevention as cost-effective strategies. As such the delivery of health care will be based on the following principles:

The development of an integrated health system, which has clear and inter-linked roles for the primary, secondary and tertiary levels of care

The strengthening of the referral system between the levels of care to ensure the efficient use of different levels of specialised and appropriate feedback between health care professionals

The importance of ensuring involvement of communities, and the voiceless within these communities, in decisions about health

An emphasis where appropriate on preventive strategies

The Ministry of Health and Sanitation is responsible for ensuring adequate public health programmes for priority diseases including malaria. As part of the decentralisation process to which the government is committed current vertical programmes will be integrated, as far as is technically possible, within the district services. All health care providers, both public and private, will be expected to conform to the specific technical policies and treatment protocols.

Health education, health promotion and intersectoral activities: As part of the primary care philosophy to which the Government is committed, emphasis will be placed on health education and health promotion activities. This will occur at all levels of the health system. This will include activities aimed at changing positively the life style of individuals and communities. It will also include advocacy activities aimed at promoting policies in other sectors of the economy, which are positive to health, and discouraging or legislating against activities that lead to a reduction in health development.

Role of different agencies in the health system: The Government of Sierra Leone recognises the important services provided by many of these agencies and will work towards ensuring complementary and positive relations between the different agencies.

The role of the **Ministry of Health and Sanitation Headquarters** is primarily to provide policy and planning leadership (both strategic and technical) for the whole sector, to ensure an equitable financing and resource allocation system for the health sector, to provide national leadership on health promotion and intersectoral collaboration including any appropriate legislation, and to regulate all health care providers to ensure quality standards are set and maintained.

Where it is considered that **an institution in the NGO or private sector** is already providing, or is capable of providing, a service on behalf of government, at an appropriate level of quality and cost, arrangements will be explored for contracts and subventions for such services.

Private for profit providers will also be required to register with the Professional Councils. As for-profit organisations, they will not be generally eligible for government support. However, where they are seen to be providing a service on behalf of government (for example, in the field of childhood immunisation) they will be eligible for support in terms of vaccines and training.

Traditional practitioners including TBAs have a long history in Sierra Leone. The Government of Sierra Leone recognises the important services provided by some of these, but is also concerned that others may unknowingly not be providing services in the best interests of their patients. A code of practice will be drawn up which will, inter alia, specify the relationship between such practitioners and the District Health team.

Human resources for the health sector: There is a critical shortage of staff from a range of health professions currently working in the health sector and particularly in the remote districts (See Table 2).

Table 2: Key Human Resources in Health Sector

Cadre of Health Workers	Government	Non-government	Total
Doctors	169	131	300
Professional Nurses & Midwifes	406	200	606
Other nursing personnel	1655	1500	3155
Environmental Health Officers	168	36	204
Community Health Officers	194	90	284
Laboratory Scientist	1	6	7
Laboratory technicians	28	12	40
Laboratory Assistant	30	30	60
Other Related professionals	2	5	7
Pharmacist	11	111	122
Dispensing Technicians	124	158	282
Radiographers	4	8	12
Endemic Disease Control Assistants	332	-	332
Entomology Assistant	2	-	2
Vector spotter/controllers	65	-	65
Record Staff	60	-	60
Nutritionist	4	8	12
X-Ray technicians	9	20	29
PH / MCH Aides	153	-	153
Mental Attendants	84	-	84

Source: Information sheet, Ministry of Health and Sanitation- July 2002

Drug Supplies: The provision of good quality care is dependant on the availability of safe and affordable medical supplies. Such supplies should be in accordance with the Essential Drug list. The Ministry of Health and Sanitation will ensure that there are appropriate levels of resources to operationalize the Pharmacy and Drug Act (2000) and, where appropriate, update the 1993 Drug Policy to cover the areas of procurement, distribution and quality control.

Health management information system: The monitoring of progress of policies and plans is dependant on the availability of reliable and standardised information. The Ministry of Health and Sanitation will develop, in conjunction with key partners, a unified Health Management Information System to meet these needs.
(See organograms in the annex).

Malaria information and epidemiology:
Historical background:
It is known that when the early European explorers visited the country, so many of them died of the disease that they nicknamed Sierra Leone as "the white man's grave". Ross and his team embarked on a massive mosquito control campaign, by filling up the breeding places and clearing the drainages. The first malaria prevalence survey was conducted in the country in 1963 with WHO support. An overall 31.4% malaria prevalence and this rose to 65% during the 1977/79 national malariometric survey conducted by the Ministry of Health in collaboration with WHO (WHO report 1980).

Present Malaria Situation:
Malaria is one of the most serious public health problems in Sierra Leone especially in the post conflict era. The entire population is at risk of developing the disease accounting for over 40.3% of outpatient morbidity, but the most vulnerable groups include under-five year old (U5) children, pregnant women, refugees and returnees. In the U5 age group, it is responsible for 47 % of outpatient morbidity, 37.6% of all hospital admissions of which 17.6% would die. Mortality attributed to malaria is 38.3% (Under-five) and 25.4% (all ages).

In a national survey (1995), 87.1% of pregnant women were anaemic. Seventy percent (70%) of the anaemia was due to malaria. In another study carried out in 2003, 37.1% of pregnant women had malaria. At the Princess Christian Maternity Hospital (PCMH), which is the national referral hospital, 11% of the maternal deaths were associated with malaria (2000). Malaria is a disease of poverty as a cause and a consequence. Malaria is a major threat to the socio-economic development of the country with an estimated 7-12 days lost on the average per episode of malaria. Developing a national strategic plan to control malaria in an integrated disease control approach is a right step in the right direction for Sierra Leone especially as the nation moves into the recovery phase.

Vector bionomics and distribution:
The predominant vector is Anopheles gambiae s.l, while others are An. funestus and An. melas. The Anopheles gambiae s.l is predominant in the wet season. The peak biting period is between 10p.m – 2a.m. Plasmodium falciparum is predominant parasite species with more than 90% with mixed infections occurring occasionally with plasmodium malariae and ovale (MRC, 1998).

Drug resistance: Several attempts have been made over the years to conduct anti-malarial drugs efficacy studies in Sierra Leone both at individual and programme levels. In an effort to continue monitoring the efficacy of Chloroquine, the NMCP in collaboration with WHO established 2 sentinel sites in Freetown, in the year 2000. The first results from the sentinel monitoring in January 2000 reported an 8.3% prevalence of clinical failure. The results for the periods January 2000 – December 2000 and January 2001 – May 2001 were 6.1% and 0% treatment failures at Lumley Health Centre and Rokupa District Hospital respectively.

The most recent study on chloroquine (CQ), sulphadoxine–pyrimethamine (SP), and Amodiaquine (AQ) in selected districts, conducted by MOHS and partners, validated by MOHS and WHO in July 2003 is as shown in Table 3.

Table 3: Drug Efficacy Test Validated Results (July 2003)

Antimalarial Drug	Clinical Cure Rate (%) by Day 14	Failure Rate (%) by Day 14	Failure Rate (%) by Day 28	PCR failure rate result by day 14
CQ	20 - 60	40 - 80	67%	39.5 - 78.8
SP	72 - 98	2 - 28	50% in 1 site	17.6 - 46.1
AQ	92 - 100	0 – 8	31	Not available

Following a consensus meeting in March 2004 on validated drug efficacy results, in the cause of which the merits and demerits of ACT were extensively discussed, a decision was taken to adopt the use of ACTs and to review the current antimalarial treatment policy.

Figure 1: Map of study sites with observed failure proportions

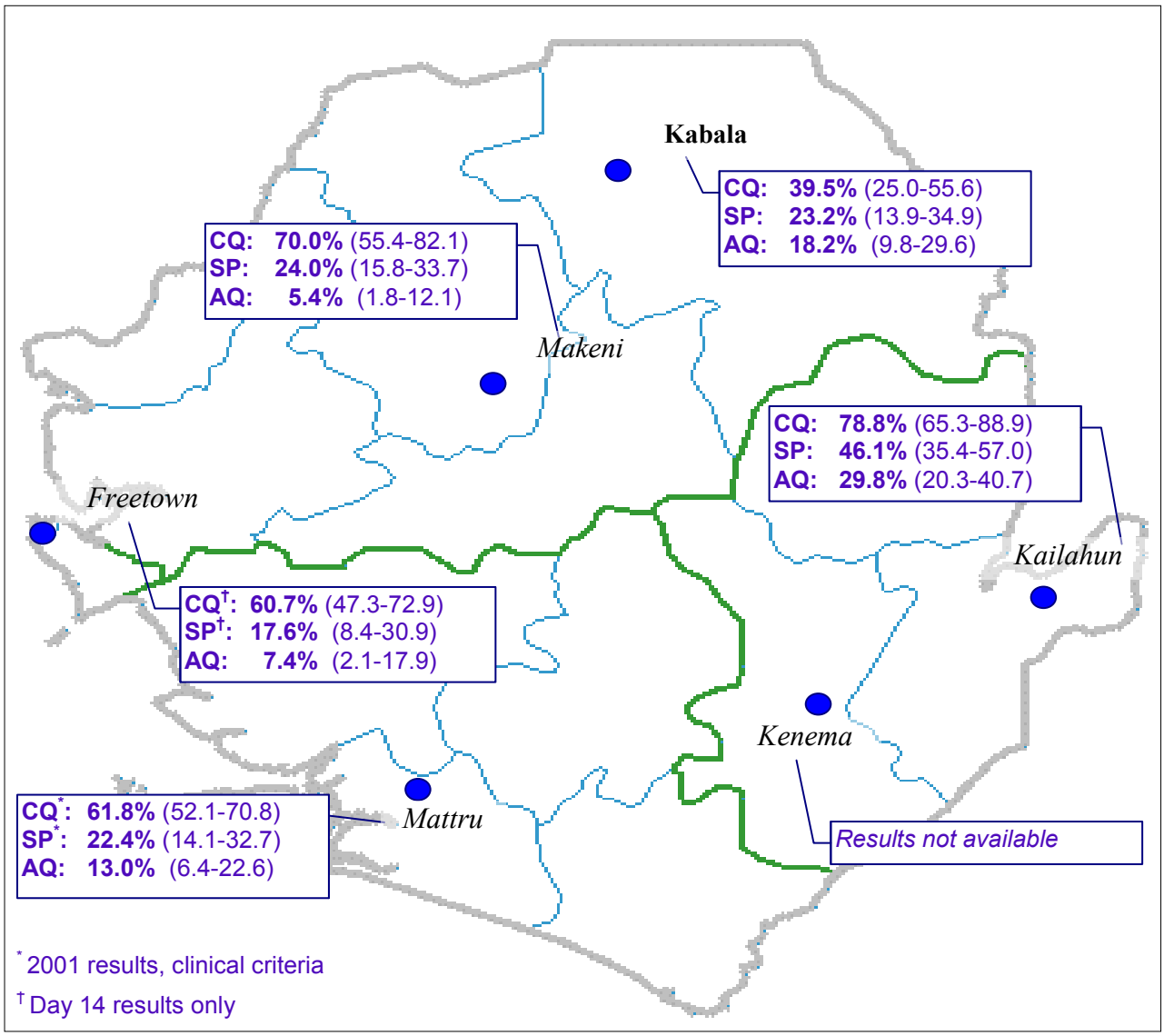
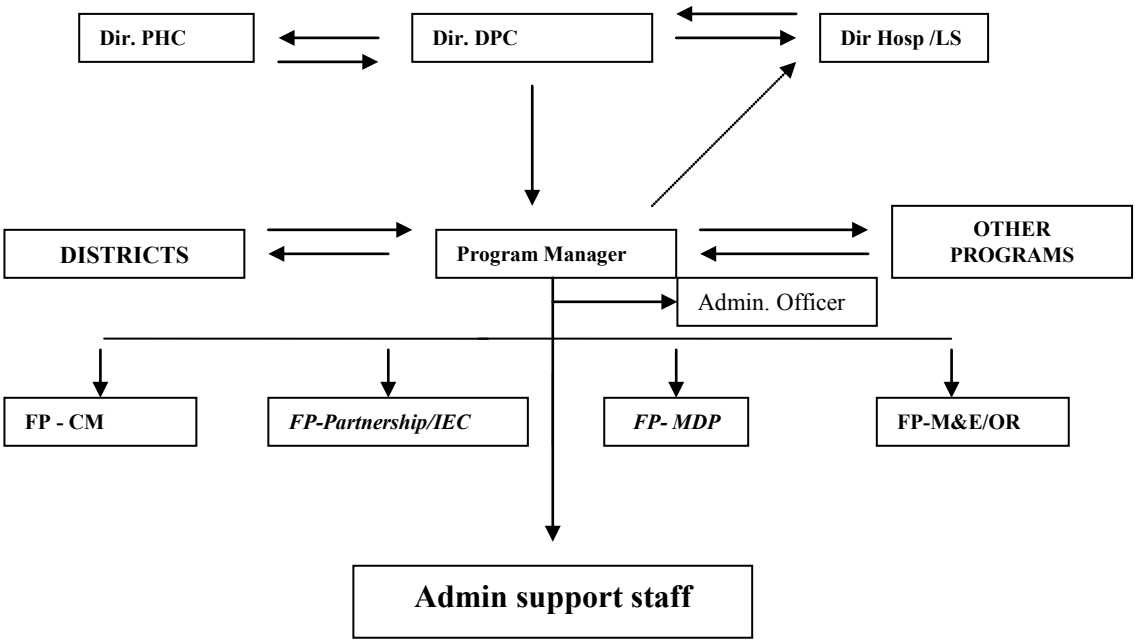


Figure 2: Organizational Structure of the National Malaria Control Program



Progress/development of Malaria control in Sierra Leone:

The Republic of Sierra Leone is a signatory to the Abuja Declaration of April 2000 to Roll Back Malaria in Africa. Since Abuja 2000 Summit, the following achievements have been made:

- Development and launching of Malaria Policy Document (April 2000);
- Development of Treatment Guidelines (2000);
- Official launching of Roll Back Malaria Initiative (2001);
- Formation of RBM taskforce (2001);
- Desk-Top Analysis (2001);
- Approval of relevant policies / legislation: Malaria Control Policy, Malaria Treatment Guidelines, Health Education Policy, and Pharmacy and Drugs Act of 2001.
- Approval of tax waiver on mosquito nets, insecticides, antimalarial drugs effective 2003;
- Drug efficacy studies (2002/3);
- Situation analysis (2004);
- Consensus meeting and approval of ACT (2004);
- Adoption of IPT (2004).

The National Malaria Control Programme:

This is a unit in the Directorate of Disease Prevention and Control of the Ministry of Health and Sanitation (MOHS). Malaria Control is a major component of the revised National Health Plan. The NMCP is headed by a Manager supported by four core staff and a secretary. The mandate is to plan, facilitate the implementation, coordination, supervision, and monitoring of malaria control activities in an integrated disease control approach. MOHS has a specific budget line item for Malaria that supports the implementation and monitoring of various control interventions such as ITNs, Prompt and appropriate management of cases. To promote partnership, there is a broad based RBM Task Force Committee at the national level while there is District Health Management Team at the sub-national levels.

However, the following weaknesses are observed: inadequate human, material and logistic support including lack of adequate office space; and poorly coordinated support from RBM partners (including lack of a WHO-National Professional Officer).

STRATEGIC PLAN:
STATEMENT OF OBJECTIVES

PERIOD: 2004 -2008

GOAL: To reduce malaria morbidity and mortality in Sierra Leone.

OBJECTIVE:

To reduce malaria morbidity and mortality by 25% in all age groups in the 13 districts of Sierra Leone by 2008.

SPECIFIC OBJECTIVES:

1. To reduce the malaria morbidity and mortality of the U5 children in Sierra Leone by 25% by the end of 2008.
2. To reduce the malaria morbidity and mortality among pregnant women in Sierra Leone by 35% by the end of 2008.

TARGETS:

1. Reduced malaria morbidity of under fives from 47% to 35% by 2008
2. Reduced malaria mortality of under fives from 38% to 29% by 2008
3. Reduced malaria morbidity of pregnant women from … % to …% by 2008
4. Reduced malaria mortality of pregnant women from 11% to 7% by 2008

INTERVENTIONS:

1. Disease Management

2. Multiple Disease Prevention

3. Advocacy; and Information, Education, Communication (IEC) and Social Mobilization

4. Partnership strengthening and Programme Management

5. Operational Research

6. Monitoring and Evaluation

PROGRAMME OBJECTIVES AND TARGETS:

OBJECTIVES	INDICATOR(S) (impact)	BASELINE (2004)	TARGETS (%)				
			2005	2006	2007	2008	
1. To reduce the malaria morbidity and mortality among the under fives by 25 % by the end of 2008	% of malaria morbidity among under fives at **health facility level** (routine data)	47%	44	41	38	35	
	% of malaria mortality among under fives at **health facility level** (routine data)	38.3%	36	34	31	29	
	% of malaria morbidity among under fives at **community level** (Survey)	Data to be supplied later					
	% of malaria mortality among under fives at **community level** (Survey)	Survey to be conducted (CS 3)					
2. To reduce the malaria morbidity and mortality among pregnant women by 35% by the end of 2008.	% of malaria morbidity among pregnant women at **health facility level** (routine data)	To be collected	…	….	….	….	….
	% of malaria mortality among pregnant women at **health facility** (routine data)	11%	10	9	8	7	
	% of malaria morbidity among pregnant women at **community level** (Survey)	37%	34	30	27	24	
	% of malaria mortality among pregnant women at **community level** (Survey)	Survey to be conducted					

INTERVENTIONS:

1. DISEASE MANAGEMENT

1.1 Objective: To increase access to early diagnosis and prompt treatment of all malaria cases to 60% by 2008.

1.2 Target: At least 60 percent of those affected by malaria have access to prompt, appropriate, and affordable treatment by 2008.

1.3 Baseline:

Malaria is endemic in Sierra Leone. It is presently the leading cause of morbidity and mortality amongst children under five years of age. It is the first on the list of Government priority diseases. The entire populace is at risk of developing the disease accounting for over 40.3% of outpatient morbidity, but the most vulnerable groups include under-five year old (U5) children, pregnant women, refugees and returnees. It is a disease of poverty as a cause and a consequence. Malaria is a major threat to the socio-economic development of the country with an estimated 7-12 days lost on the average per episode of malaria. The increasing resistance to hitherto effective and relatively affordable antimalarial drugs compounds the problem. The situation analysis revealed the following weaknesses in case management in Sierra Leone.

At National and District Levels:

About 12% of health care providers gave correct dosage of antimalarial drugs. Only about 11.5% of health workers are trained in malaria case management within the past two years. Apart from the core group, no other health worker has been exposed to IMCI training.

About half (56%) of the health facilities are fully functional. Laboratory support for diagnosis of malaria is poor. Health facilities are poorly staffed and personnel poorly motivated. Treatment guidelines are available but inadequate to cover all health facilities. Referral networks and System for monitoring and evaluation are poorly developed. Funding for malaria control in 2004 showed an increase of 31% over that of 2002. Although the actual amount allocated may be relatively low, this trend is a demonstration of Government commitment in accordance with the Abuja Declaration.

No anti-malarial drugs are manufactured locally. The inappropriate use of parenteral anti-malarial drugs is widespread.

At the Community (Home Management) level:

About half of the respondents at household level (51.6%) practice self-medication using drugs from doubtful sources while few (3.9%) malaria cases consult traditional healers leading to inadequately managed cases at community level. Reporting of malaria mortality in the communities is poor due to wrong perception on the cause of the disease, very few people in the community link mosquitoes to malaria. Knowledge and treatment practices of the mothers in the management of convulsion is very poor, a very low percentage refer such cases to hospital, while most either go to traditional healers or use traditional home made concoctions.

Strengths:

- Malaria control is identified as a priority health programme within the framework of the National Health Policy. A national malaria policy, strategic plan, and treatment guidelines have been developed.

- MOHS staff such as the DHMTs, PHU and programme staff are in many parts of the country.
- There is a strong political commitment which is indicated by the provision of tax waiver on all antimalarial products and the policy of free treatment for all pregnant women and under five children.
- Drug regulatory and enforcement body (Pharmacy Board) has been set up.
- The Malaria control programme through the Health Sector Reconstruction and Development Project is being supported by World Bank in 4 districts.

Weaknesses:

- Inadequate trained human resources
- Poor diagnostic facilities
- Irregular supervision and monitoring
- Poor record keeping at all levels

Opportunities:

- Availability of an established cost recovery system in the PHU.
- There is an ongoing program of rehabilitation and reconstruction of all health facilities destroyed during the war funded by GoSL supported by World Bank, ADB, IDB and EU.
- Potential sources of support anticipated from the Global Fund (GFATM) for eight districts.
- Potential collaboration with relevant programmes such as IMCI, RH, EPI, IDSR, among others.
- The households and the communities recognize malaria as a major health problem.
- There is an ongoing decentralisation process at district and chiefdom levels with reestablishment of community structures such as area development committees at chiefdom and village levels.
- Available community volunteers and community motivators at village level can be used for home based care and dissemination of information.
- In line with National Drug Policy, the patent medicine sellers (PMSs) have been enlisted to undergo training to improve their services.

Threats

- Emerging resistance to antimalarial drugs
- Poor compliance with appropriate antimalarial drug regimen
- Difficulties in controlling the importation of substandard / fake anti-malarial drugs.
- More than 80% of all malaria is handled at home using orthodox anti-malaria drugs and or native herbs (medicinal roots and leaves). Most of such treatment is based on presumptive diagnosis and self-prescription.
- High cost of combination therapy.

1.4 Key Strategies:

Strategies will include drug policy review; capacity building to improve skills; improving access to diagnostics and treatment services at health facility and community level; and strengthening of support systems.

1.5 Operational Strategies:

1.5.1 Review of Malaria Treatment Policy to consider the following issues:

- Recognition of home as the first point of treatment and strengthen home care with training and information packages for easy use of anti-malarial drugs.
- Recognition of the role of Patent medicine sellers and provide for strengthening / improvement of their knowledge and better practice through information packages, training and monitoring of quality of their products through supervision.

- Following antimalarial drug policy review, continued monitoring of the efficacy of antimalarial drugs especially combination therapy.
- Integration of micronutrient supplementation in malaria case management in collaboration with IMCI, EPI/MCH, and RH.
- Adoption of integrated disease control approach, involving village health workers and traditional birth attendants in malaria control in the context of IMCI / RH /EPI/MCH and other health care programs.
- Continuing collaboration with Pharmacy Board to enforce compliance with drug regulations including accelerated registration, procurement procedures, intensified inspection of drug providers and suppliers' premises and quality control.
- Promotion of local manufacturing of anti- malarial drugs
- Promotion of research into and use of local herbal remedies.
- Review of school curricula to include modules on prevention, and management of malaria.
- Recognition of the role of NGOs and private sector and integrating them into the planning and implementation of RBM initiatives.

1.5.2 Improving Access will consider the following:

- Establishing Treatment points in Schools e.g. through ***Child Friendly School Initiative (CFSI),*** and outreach centres in public centres.
- Strengthening capacity for community and home based care in communities, patent medicine sellers (PMS).
- Community based health care providers (TBAs, PMS, VHW, Traditional healers) will be given supportive supervision.
- Advocacy for equity in deployment and retention of health providers.
- Mechanism for equitable access to affordable drugs by vulnerable groups
- Improving health facility capacity (especially referral system) and utilization through staff motivation, promotion of positive attitudinal changes; and provision of registered drugs and other supplies.

1.5.3 Capacity Building and Quality of Performance of Health Providers will consider:

- Regular updating of, and distribution of treatment protocols to all health care providers.
- Provision of treatment guidelines in all health facilities and encourage its utilization by all providers especially at PHU and community levels.
- Harmonizing IMCI, RH and malaria treatment protocols and mount joint programs to scale up provision of services.
- Strengthening the linkage between the formal sector and traditional healers to promote referral of malaria patients.
- Capacity building for appropriate home and community management of uncomplicated cases including good referral practices
- Ensuring proper storage of essential drugs and appropriate linkage with established distribution channels.
- Periodic refresher courses in malaria case management organized for different cadres of formal health workers to strengthen capacity for malaria case management using the national malaria treatment guideline made available to all health facilities.
- Collaboration with training institutions to ensure that pre-service training curricula for health personnel are consistent with the national malaria policy

1.5.4 Support Systems as part of the Implementation Strategies will consider:

- Strengthening the capacity of District Health Management Teams for planning, implementation, monitoring and evaluation of RBM activities in the Districts and community levels.
- Resuscitating and strengthening health committees in each community for active participation in the planning, implementation and evaluation of RBM activities at the community level.

- Provision of logistics to facilitate regular integrated supportive supervision of facility-based health workers, other primary health workers and home caregivers including PMSs, and traditional healers.
- Institution of continued drug efficacy monitoring e.g. through Sentinel District Monitoring which feeds into HMIS.
- Development of community referral support systems.
- Strengthening the capacity and strategic position of laboratory diagnostic and drug storage facilities.
- Recognition and mobilizing support of NGOs and CBOs, private sector at community level for malaria prevention and management.

1.6 Milestones:

- A task force for the preparation of implementation of policy change operational by end of March 2004.
- National drug policy on malaria treatment & prophylaxis revised by June 2004.
- All missing data to be collected by August 2004.
- Implementation of revised policy commences by June 2005.
- Set up sentinel sites in the districts for antimalarial drug efficacy monitoring by the end of 2005.
- Availability of Artemisinin-based Combination Therapy (ACTs) antimalarial drugs in all health facilities by December 2006.

1.7 Cost estimate for Disease Management:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Disease Management	1,536,732	1,465,300	1,347,100	1,509,400	1,246,600	**7,105,132**

Table1. DISEASE MANAGEMENT:

OBJECTIVES	INDICATOR(S) Outcome/coverage	BASELINE	TARGETS			
			2005	2006	2007	2008
1. To increase access for early diagnosis and prompt treatment of all malaria cases to 60% by 2008.	% of **U5s** affected by malaria having access to prompt, appropriate, and affordable treatment within 24 hrs at **health facility level** (routine data)	To be collected	…	…	…	…
	% of **U5s** affected by malaria having access to prompt, appropriate, and affordable treatment within 24 hrs at **community level** (through survey)	21.7%	31	41	51	60
	% of **Pregnant women** affected by malaria having access to prompt, appropriate, and affordable treatment within 24 hrs at **health facility level** (routine data)	To be collected				
	% of **Pregnant women** affected by malaria having access to prompt, appropriate, and affordable treatment within 24 hrs at **community level** (routine data)	To be collected				
	% of **all cases** affected by malaria having access to prompt, appropriate, and affordable treatment within 24 hrs at **health facility level** (routine data)	To be collected				

INTERVENTIONS:

2. MULTIPLE DISEASE PREVENTION

Objectives:

1. To increase the percentage of children under-five sleeping under ITNs in all the districts by 2008 from 6.6 % to 30 %.
2. To increase the percentage of pregnant women sleeping under ITNs in all the districts by 2008 from 2% to 40%.
3. To attain 60% coverage of pregnant women receiving IPT by 2008.
4. To establish a collaborative mechanism on vector control with Environmental Health Division among other relevant institutions.

Targets:

1. At least 30 % of U5s sleep under ITNs by 2008.
2. At least 40% of pregnant women sleep under ITNs by 2008.
3. At least 60% of pregnant women receive IPT by 2008.
4. Functioning collaborative mechanism established between NMCP and Environmental Health Division by 2005 on other vector control activities.

Introduction:

The overall goal is to make available key multiple preventive interventions such as ITNs, IPT and other vector control measures available to the population especially the vulnerable groups.

Malaria transmission is perennial throughout the country. Though the entire population is at risk, the most vulnerable are the children under-five years of age and pregnant women.

The reduction of man-vector contact and the use of ITNs and environmental management have been considered. The burden of malaria in pregnancy would be reduced through the use of intermittent Presumptive treatment (IPT) strategy. The ITNs and environmental management are currently on a small scale while IPT services is yet to start.

2.1 Insecticide Treated Nets.

Baseline: ITN use has been incorporated into the malaria control policy. However, ITN policy guideline is yet to be finalised. Bed-net use among pregnant women is estimated to be 12.2%. ITN coverage for children under five years is 6.6 % and that of pregnant women is 2%.

Strengths:

- Pockets of research trials on ITN use in the country have been conducted and demonstrated its impact in reducing childhood morbidity and mortality (MRC in Bo).
- Taxes and tariffs have been completely removed on ITNs and antimalarial commodities
- Retention level is high as there is a high level of social acceptability of bed nets by community members.
- Availability of draft ITN Policy Guideline
- There is involvement of key donors in ITNs projects (WHO, UNICEF, UNDP, WB, ADB, USAID, DFID, etc.).

Weaknesses:

- Less than 1% of the population use ITNs.
- Inadequacy of ITNs

- Non-involvement of the private sector
- Inadequate information on ITNs.
- Weak capacity for ITNs programme implementation and monitoring.

Opportunities:

- In pilot project areas there is an appreciation of the benefits of the ITNs use in terms of prevention of mosquito bites and other diseases and its social benefits.
- Households and communities have also shown willingness to purchase the ITNs once affordable and accessible.
- Capacity building activities are on going.

Threats:

- High cost of ITNs
- Abuse and misuse of ITNs

2.1.3 Key Strategies:

Strategies will include Reviewing and finalisation of ITN Policy Guidelines, Capacity building, Improving access to ITNs and re-treatment and support systems.

2.1.4 Operational Strategies:

2.1.4.1 Reviewing and finalisation of ITN Policy Guidelines will consider the following:

- Choice of Insecticide Treated Mosquito Net in terms of using LLN or re-treatable
- Involvement of the private sector and other RBM partners.

2.1.4.2 Capacity Building will consider the following:

- Building capacity including training of health workers, CORPS and other RMB partners for planning, implementing, supervising, monitoring and evaluation of ITMs programmes, including treatment and re-treatment of nets.

2.1.4.3 Improving Access to ITNs and Re-treatment will consider the following**:**

- Mechanism for subsidising scheme especially for vulnerable groups.
- Advocate and mobilise resources for ITNs.
- Integrating ITNs implementation with relevant programmes such as MCH/EPI , RH, Essential Drugs Programme and IMCI.
- Ensuring availability of ITNs at community levels

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2.1.4.4 Support Systems will consider the following:

- Strengthening logistics mechanism to support distribution channels
- Optimising the use of community based structures.

Milestones:

- Guidelines on the ITNs implementation finalised and disseminated by December 2004.

- Availability of training manuals, promotional packs and M&E checklist by December 2004.

Cost estimate for scaling up the use of ITNs:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Insecticide Treated Nets	377,800	23,195,485	295,290	48,060	64,400	**23,981,035**

2.2 INTERMITTENT PREVENTIVE TREATMENT (IPT) IN PREGNANCY:

Base line: This is a cost-effective intervention that is being introduced in Sierra Leone. The effectiveness has been demonstrated in other countries with similar endemic patterns in the region.

Strengths:

- High coverage of chemoprophylaxis.
- Availability of drug of choice and inclusion in EDL.
- Administration using DOT strategy.

Weaknesses:

- Coverage limited to those that utilise ANC services.
- Lack of awareness among health workers on the use of SP during pregnancy.

Opportunities:

- The potential for integration into well established programmes such as RH and EPI
- Availability of other country experiences on IPT implementation.
- High utilisation of antenatal care services (about 68%).

Threats:

- Emerging drug resistance of anti-malarial drugs used
- Unfounded fears of miscarriage / teratogenicity.

Key Strategies are review of drug policy, improving access, capacity building and system support.

Operational Strategies:

Review of Policy will consider the following**:**

- Introduction of intermittent preventive treatment (IPT) for pregnant women.
- Development of an implementation guideline.
- Harmonization of the policy with other programs such as RH, IMCI and PHC.

Improving Access will consider**:**

- Encouraging early registration and regular use of ANC services.
- Advocating for the implementation of National policy on exemptions for vulnerable groups including pregnant women.
- Increasing awareness at community level.

Capacity Building will consider the following**:**

- Development of training manuals and orientation packages.
- Training of health workers including TBAs and community based health workers in the implementation of IPT as a strategy for preventing malaria in pregnancy (MIP).
- Community education program to mobilize for male involvement.

System Support will consider the following**:**

- Integrating IPT into relevant programmes such as RH, nutrition, EPI, IDSR and EDP.

Milestones:

- Intermittent Preventive Treatment (IPT) will be adopted by mid 2004.

- Development of IPT implementation guidelines by December 2004.

Cost estimate for IPT implementation:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Intermittent Preventive Treatment	30,545	31,584	32,658	33,768	33,150	**161,702**

2.3 VECTOR CONTROL

Vector Control is one of the strategies to reduce mosquito-man contact and proliferation of the vector in Sierra Leone. Communities will be sensitised to reduce vector breeding sites in their environment. Efforts will be made to collaborate with the relevant agencies.

Baseline:
Currently, in selected areas such as camps and depressed areas, the vector controls measures used are targeted spaying using insecticides and environmental sanitation.

Strengths:

- The restructuring and merger of the Medical Entomology Unit to the National Environmental Health division;
- Availability of Environmental Health Policy;
- On going Vector Control interventions by the environmental health division and personnel in the districts;
- On going collaboration with other relevant institutions.

Weaknesses:

- Weak collaboration with NMCP in the implementation of vector control activities.
- Weak capacity such as logistic support to control vectors in communities.
- Unavailability of a National Medical Entomologist.
- Under utilization of available vector control technicians for malaria.
- Poor vector control measures at household level in communities mostly due to lack of adequate information.

Opportunity:

- The on going decentralization process will enhance wider community involvement and participation in decision-making and interventions.

Threats:

- Possible vector resistance to insecticides
- Use of sub-standard insecticides
- Hostile terrain.

Key Strategies include promotion of partnership and capacity building.

Operational Strategies:

Promote partnership will consider the following:

- Joint planning, implementation and monitoring of malaria vector control and research activities.
- Information sharing and regular consultations.

Capacity Building will consider the following:

- NMCP's collaboration with the Environmental Health Division to build capacity for vector control activities at all levels.

Milestones:

Commence regular collaborative meetings with partners on vector control interventions by May 2004

Cost estimate for Vector Control:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Vector control	13,700	200	13,700	200	200	**28,000**

Table 2: MULTIPLE DISEASE PREVENTION

OBJECTIVES	INDICATOR(S) Outcome/coverage	BASELINE	TARGETS (%)			
			2005	2006	2007	2008
2.1.1 To increase the percentage of children under-five sleeping under ITNs in all the districts	% of children under five sleeping under ITNs. (survey)	6.6%	13	18	24	30
2.1.2 To increase the percentage of pregnant women sleeping under ITNs in all the districts	% of pregnant women sleeping under ITNs. (survey)	2%	10	20	30	40
2.2 To attain 60 % of pregnant women receiving IPT in all the districts	% of pregnant women receiving IPT at Antenatal care clinics (routine data)	0%	15	30	45	60
2.3 To establish a collaboration mechanism on vector control with Environmental Health Division among other relevant institutions	1. No. of meeting reports. 2. Availability of joint plan on vector control activities. 3.% of planned activities implemented	0 0 0%	2 1 30%	2 1 60%	2 1 80%	2 1 100 %

INTERVENTION:

3. ADVOCACY, INFORMATION, EDUCATION, COMMUNICATION AND SOCIAL MOBILIZATION

Objectives:

1. To secure commitment from policy/decision makers, partners and key stakeholders on a continuous basis for more resources to roll back malaria in Sierra Leone.
2. To influence positive behavioural change through increase in awareness and improved knowledge on malaria prevention and control.

Specific Targets by the year 2008 are:

- Written commitment towards strategic plan implementation from policy makers, partners and key stakeholders.
- At least 80% of households will be able to recognise signs and symptoms of malaria.
- At least 80% of households will be able to know key malaria control interventions, namely: a) access to prompt and appropriate treatment, b) the use of ITNs, c) the use of IPT by pregnant women.
- At least 60% of households will be able to take appropriate action on key malaria control interventions.

Baseline: The Government of Sierra Leone and partners have expressed commitment to RBM implementation. Africa Malaria Day is commemorated yearly. There is no communication strategy. Knowledge of mothers/caregivers on recognition of signs and symptoms of malaria is 32%.

Strengths:

- There is a political commitment in the campaign against malaria.
- There are existing structures for the dissemination of relevant information.
- Increasing number of radio stations at district level.
- Commemoration of Africa Malaria Day has become a regular national activity.
- There is already a sub-committee for IEC/Social mobilization.

Weaknesses:

- No country specific communication strategy.
- Limited knowledge on RBM initiative at community level.
- Limited human and financial resources to implement IEC and advocacy activities.
- Conflicting messages from multiple sources.

Opportunities

- CHWs trained in IEC.
- Generic RBM-IEC materials for adaptation.
- School Health Programme.
- Strong civil society.
- Exploitation of existing sub-regional structures to facilitate exchange of information/experience
- Growing recognition of traditional medicine and the use of traditional healers as change agents.

Threats

- High illiteracy level especially among the girl child
- Economic limitation to effect positive change in behaviour.
- Limited RBM commodities, (e.g. ITNs and drugs) to meet generated demands through IEC and advocacy.

Key strategies include Advocacy, Communication strategy, social mobilization and System support.

Operational Strategies:

Advocacy will consider the following:

- Critical analysis of gaps in reaching the stated objectives of this Strategic Plan (e.g. Roll Back Malaria Essential Actions Progress Investment Gaps -REAPING).
- Development of advocacy strategy.
- Commemoration of important RBM related events.

Communication will consider the following:

- Development of RBM communication strategy.

Social Mobilization will consider the following:

- Active participation of community members especially opinion leaders.
- Intersectoral collaboration particularly at local administration level.

Support System will consider the following:

- Collaborations: Multi-media support, involvement of Faith based organizations.
- Capacity Building at all levels.

Milestones:

1. Communication strategy developed by end of 2004.
2. Advocacy strategy developed by October 2004.
3. Malaria focal person in all relevant committees at district level by June 2005.
4. IEC incorporated in all training manuals for RBM by end of 2005.

Cost estimate for Advocacy, IEC and Social Mobilization:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Advocacy, IEC and Social Mobilization	372,870	83,220	59,220	83,220	59,220	**657,750**

Table 3: Advocacy, IEC and Social Mobilization

OBJECTIVES	INDICATOR(S)	BASELINE	TARGETS			
			2005	2006	2007	2008
1. To secure commitment from policy/decision makers, partners and key stakeholders on a continuous basis for more resources to roll back malaria in Sierra Leone.	% of health budget for malaria control.	to be collected				
	% contribution of key stakeholders to annual malaria control budget.	To be collected				
2. To influence positive behavioural change through increase in awareness and improved knowledge on malaria prevention and control.	% of households able to recognise signs and symptoms of malaria.	To be collected				
	% of households able to know key malaria control interventions.	To be collected				
	% of households able to take appropriate action on key malaria control interventions.	To be collected				

INTERVENTION:

4: PARTNERSHIP STRENGTHENING AND PROGRAMME MANAGEMENT

Objectives:

1. To establish and maintain a functional RBM partnership of all stakeholders in Sierra Leone to achieve the set targets by the year 2008.

2. To improve the institutional and managerial capacity of the NMCP by the year 2007.

Targets:

1. At least 60% of all identified RBM partners to support RBM interventions by 2008
2. At least 80% of manpower, logistics and financial requirements are met by 2008.

Baseline

Roll Back Malaria (RBM) initiative is a global partnership of interested parties committed to work together, mobilise resources and provide quality support to nationwide implementation of agreed strategies and approaches for malaria control. Partnership is now a cross cutting component whose crucial role is reflected at the very pinnacle of the RBM hierarchy.

In Sierra Leone, a partnership for malaria control exists but needs strengthening particularly in the area of the private sector. A partnership profile needs to be documented.

The NMCP was established in 1994 with limited capacity with respect to logistics, financial and human resource needs. Technical support is provided by the RBM Task Force and other RBM partners. Programme management support in this strategic plan is considered critical for the overall coordination of the plan implementation. In view of the decentralisation process in the country, programme management support is also needed at district and chiefdom levels. This will facilitate active participation of the communities who are usually perceived only as beneficiaries or end users.

Strengths:

- High level of commitment from Government and some partners.
- Established NMCP.
- RBM taskforce performing limited functions.
- Some support from World Bank and ADB for programme management.

Weaknesses

- Lack of Steering Committee (top level decision making body such as RBM ICC)
- Inadequate coordination/integration among sectoral programmes (EPI/ MCH, RH/FP)
- Weak capacity of malaria programme.
- Lack of partnership management skills
- High staff turnover.

Opportunities

- Decentralisation process of the health sector by Government.
- Existence of many potential partners.
- Availability of additional funding sources e.g. Global Fund.
- Potential for collaboration with other programmes.

Threats

- Different agenda of partners **(**Partners wearing individual agency caps)
- Lack of proper exit strategy of some partners.

Key Strategies include partnership strengthening, programme management support, capacity building and system support

Partnership strengthening will consider the following:

- Developing partnership profile.
- Partnership coordinating mechanism
- Mobilising other partners.

Programme management will consider the following:

- Revision of the Terms of Reference of NMCP in line with RBM concept.
- Provision of programme management support
- Revival of National Malaria Control Advisory committee (with sub-committees on key intervention areas).

Milestones:

Inventory of programme management needs developed by June 2004.

The NMCP to have all core staff by the end of 2004.

A partnership framework and profile is established by the end of 2004

Partnership structures established and functional at all levels by the end of 2005

Procurement and installation of basic office and communication equipment by the 1st quarter of 2005.

Core staff at the NMCP receives short and / or long-term training by December 2007.

Provision of adequate office space and furnishing of office space for NMCP completed by the end of 2005.

Cost estimate for Partnership Strengthening:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Partnership Strengthening	27,800	13,400	8,000	13,400	4,400	**67,000**

Cost estimate for Programme Management:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Programme Management	2,602,400	94,800	4,800	4,800	4,800	**2,711,600**

Table 4: PARTNERSHIP STRENGTHENING AND PROGRAMME MANAGEMENT

OBJECTIVES	INDICATOR(S)	BASELINE	TARGETS			
			2005	2006	2007	2008
To establish and maintain a functional RBM partnership of all stakeholders in Sierra Leone to achieve the set targets by the year 2008.	% of identified RBM partners to support RBM interventions.	To be collected				
	No. of reports on partnership meetings at national level.	0				
	No. of districts with functional RBM partnership.	0				
To improve the institutional capacity of the NMCP by the year 2008.	% of manpower requirements met.	5/11	8/11	11/11		
	% of logistics requirements met.	20%	80	-	-	-
	% of financial requirements met.	To be collected				

INTERVENTION:

5. OPERATIONAL RESEARCH

Objective:
To provide scientific evidence to influence policy, planning and management.

Target:
At least 60% of key decisions made in programme management are influenced by scientific evidence collected within Sierra Leone and/or International best practice.

Baseline:
The need for operational research on issues of direct relevance to programme control objectives, and of ensuring that results provide guidelines for necessary programme changes cannot be over emphasized. Roll Back Malaria is based on the use of proven interventions.

Currently there are a number of evidence generating activities by the programme and pockets of independent researchers in malaria control within the country. For instance, a recent multi-site efficacy study was carried out by MOHS in collaboration with partners to determine the efficacy of chloroquine, sulfadoxine-pyrimethemine and amodiaquine for the treatment of uncomplicated *falciparum* malaria. The existing sentinel sites will continue to monitor the efficacy of antimalarial drugs.

Strengths:

- In country human capacity to undertake operational research.
- Functioning Ethics Committee.
- Translating research into policy.
- Strengthened collaboration with Statistics Sierra Leone
- Partners participation in research activities.

Weaknesses:

- Health System Research unit within the Directorate of Planning and Information is not functioning.
- Research institutions work independently and results of research undertaken not shared with other partners.
- Poor coordination of research activities.
- Limited resources for research activities.

Opportunities:

- The Medical Research Council is being revived.
- Willingness of partners to support research activities.
- Programme is now oriented towards evidence based decisions.

Threat

- Brain drain.

Key strategies include capacity building, collaboration with relevant institutions and resource mobilisation

Capacity building will consider the following:

- Support the development of a National Health Research Policy.
- Adaptation of regional guidelines on operations research for RBM.
- Training of health personnel at all levels on operational research.
- Strengthening institutions for sentinel surveillance.
- Orientation of policy makers on operational research.
- Support the conduct of operational research (e.g implementation, pilot studies, etc).

Collaboration will consider the following:

- Establishing a coordination mechanism with relevant research institutions.
- Sharing and exchange of relevant research information (including feedback)

Resource mobilisation will consider the following:

- Submission of research proposals to potential donors.
- Creation of research fund

Milestones:

Development of a research agenda by the end of 2004

Guidelines on operational research adapted by the end of 2004.

Cost estimate for Operational Research:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Operational Research	451,775	154,900	120,375	148,600	45,900	**921,550**

Table 5: OPERATIONAL RESEARCH

OBJECTIVES	**INDICATOR(S)**	**BASELINE**	**TARGETS**			
			2005	**2006**	**2007**	**2008**
To provide scientific evidence to influence policy, planning and management.	Proportion of key decisions made in programme management influenced by evidence.	2/3 (67%)	60%	60%	60%	60%

INTERVENTION

6: MONITORING AND EVALUATION

Objectives:

1. To establish a functional monitoring and evaluation system by end of 2007.
2. To monitor the RBM implementation and evaluate the effectiveness of malaria control interventions using RBM indicators by 2008.

Targets:

1. Functional M&E unit established within the NMCP by November 2004.

   At least 80% of RBM core indicators are monitored and documented by 2008.

   At least 80% of the country specific indicators within the strategic plan monitored and documented by 2008.

Baseline

There is in existence Desktop and Situation Analysis documents on RBM. There is a focal person for Monitoring and Evaluation within the NMCP.

Monitoring is a process of following the progress of the implementation of planned activities and their outputs **(using process / output indicators)** against expected outcomes in relation to financial inputs/expenditure in order to improve implementation through allocation/re-allocation of resources. This is ongoing and should be carried out ideally on 6 monthly basis using the Semi Annual Form (SAM) developed by WHO/AFRO.

Evaluation is a process of measuring **outcomes** and **impact** of RBM. The Global impact and Outcome targets have been set to guide countries in the Region. Impact and Outcome Indicators have also been developed accordingly and these have also been highlighted in the RBM in the African Region Monitoring and Evaluation Guidelines

Strengths:

- District M&E officers and VDCs at chiefdom level for district and community level supervisions.
- Established Interagency/Intersectoral meetings at national and district levels will encourage integrated supportive supervision and availability of integrated protocol.
- Data collection is ongoing at all levels.

Weaknesses:

- National Health Management and Information system is weak.
- Capacity of M&E is weak at central and district levels.
- Compilation of existing data is lacking.
- Government and partners funding for M&E is inadequate.
- Non use of standardised RBM M&E tools.

Opportunities

- Existence of an IDSR unit in the MOHS
- Funds to support the M&E through Global Fund application.
- Developed Regional RBM Guideline for M&E and clear regional core and supplemental indicators identified.

Threat

- Introduction of conflicting M&E tools.

Key Strategies include strengthening of the M&E unit at central and district level.

Operational Strategies:

Strengthening of M&E units will consider the following:

- Incorporation of RBM issues into district level M&E.
- Capacity building at all levels.
- Adaptation and production of regional M&E guidelines.
- Logistics and equipment at all levels.
- M&E networking at national and international levels.

Milestones:

M&E unit established within the NMCP by December 2004.

M&E guidelines adapted and produced by November 2004.

Baseline M&E survey conducted by December 2004.

RBM database established by June 2005.

Mid-term and End of term evaluation conducted in 2006 and 2008 respectively and reports presented to stakeholders.

Cost estimate for Monitoring and Evaluation:

Intervention	Estimated cost per year (USD)					**Total Estimated Cost**
	2004	2005	2006	2007	2008	
Monitoring and Evaluation	56,540	16,580	16,580	16,580	16,580	**122,860**

Table 6: MONITORING AND EVALUATION

OBJECTIVES	**INDICATOR(S)**	**BASELINE**	**TARGETS**			
			2005	**2006**	**2007**	**2008**
To establish a functional monitoring and evaluation system by end of 2007.	Malaria data base established at central level and integrated into the NHIMS.	0	1	-	-	-
	No. of Health districts with established malaria data base.	0	4	8	13	-
To monitor the RBM implementation and evaluate the effectiveness of malaria control interventions using RBM indicators by 2008.	% of RBM core indicators monitored and documented.	40%	50%	60%	70%	80%
	% of country specific indicators within the strategic plan monitored and documented.	64%				

BUDGET SUMMARY (USD) ESTIMATES BY INTERVENTION BY YEAR:

Intervention		2004	2005	2006	2007	2008	TOTAL
Disease Management		1,536,732	1,465,300	1,347,100	1,509,400	1,246,600	**7,105,132**
Multiple Disease Prevention		453,045	23,306,869	382,098	108,978	142,250	**24,393,240**
Advocacy, IEC and Social Mobilization		372,870	83,220	59,220	83,220	59,220	**657,750**
Partnership Strengthening		27,800	13,400	8,000	13,400	4,400	**67,000**
Programme Management		2,602,400	94,800	4,800	4,800	4,800	**2,711,600**
Operational Research		451,775	154,900	120,375	148,600	45,900	**921,550**
Monitoring and Evaluation		56,540	16,580	16,580	16,580	16,580	**122,860**
TOTAL ESTIMATE		**5,501,162**	**25,135,069**	**1,938,173**	**1,884,978**	**1,519,750**	**35,979,132**

INSIDE BACK COVER

Together we prepared it

Together we will do it

Together we will **roll back malaria**

Together we will develop our health systems

Together we will **roll in development**

IN UNITY, THERE IS STRENGTH

In partnership we can move the seemingly un-movables.

Chart 1: Organisational Chart of the Ministry of Health and Sanitation (Professional Wing)

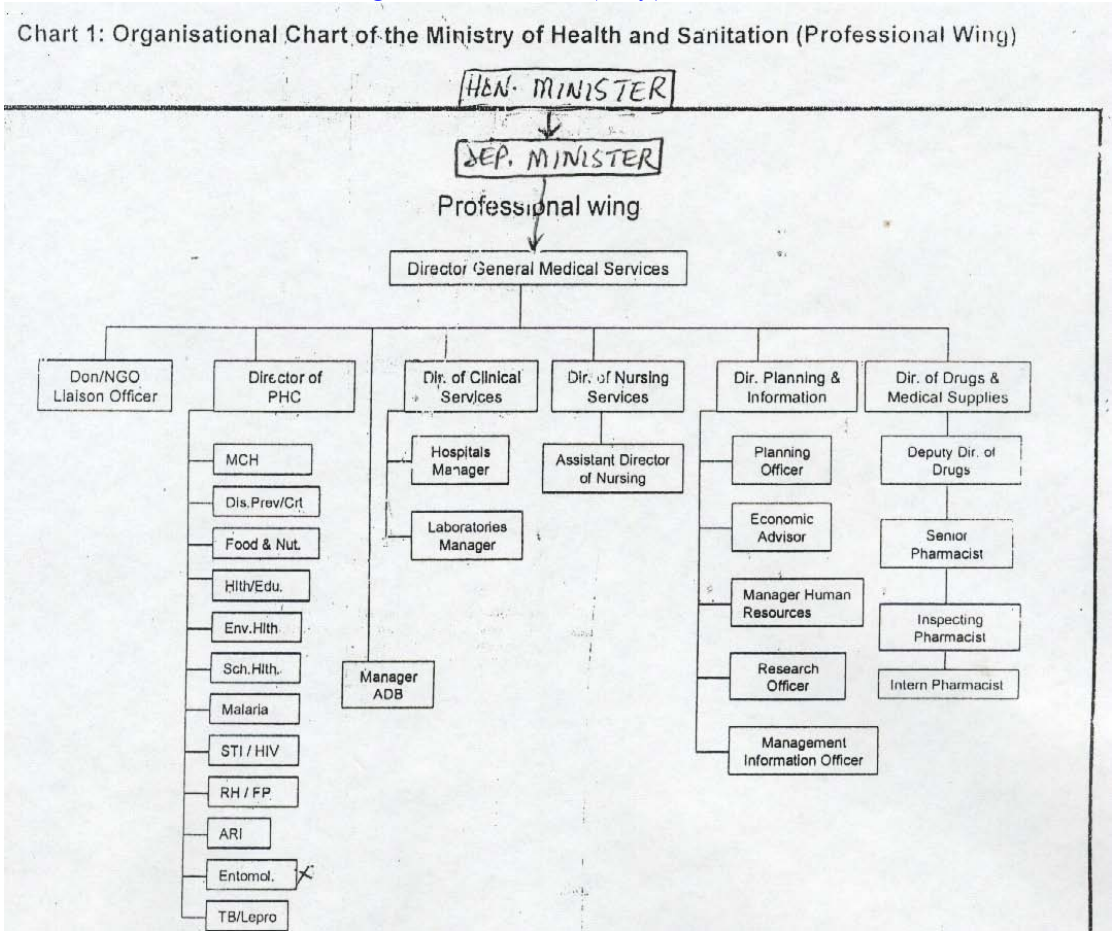
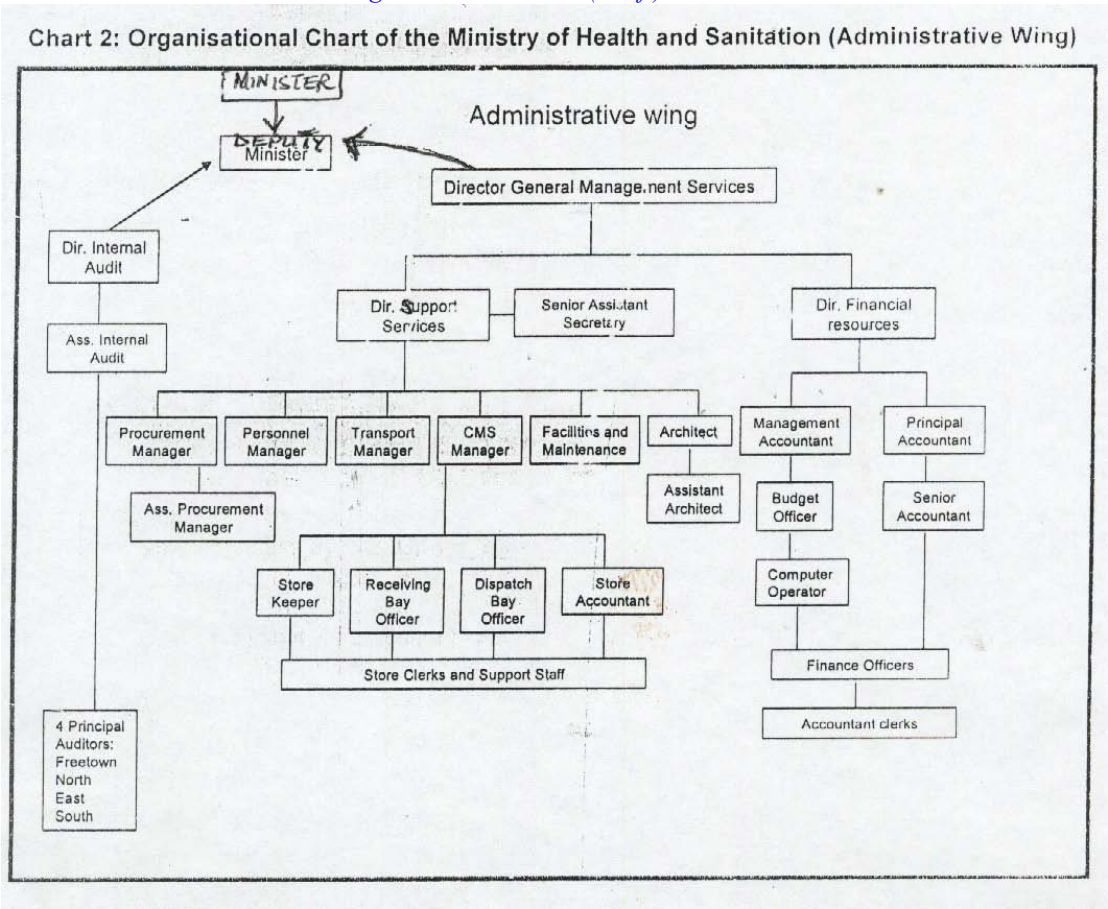


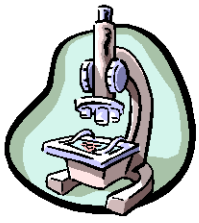
Chart 2: Organisational Chart of the Ministry of Health and Sanitation (Administrative Wing)

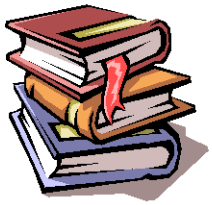


DEAD MOSQUITO CAN NOT BITE!!!

USE INSECTICIDE TREATED BEDNET (ITN)
TO KILL MOSQUITO ALWAYS

RBM as a Partnership-
Era of concerted efforts





Annexe 1: Partnership

National Level:
RBM Partnership Committee (RBMPC) which will be supported and strengthen by RBM Technical Committee, RBMTC (formerly called RBM Task Force). The RBMTC will have the following technical subcommittees:

Disease Management
Multiple Disease Prevention
Advocacy, IEC and Social Mobilization
Partnership strengthening and Programme Management
Operational Research
Monitoring and Evaluation

District Level:
The District Health Management Team (DHMT) will handle all district level coordination of RBM activities.

Chiefdom Level:
The Chiefdom Development Committee will handle all coordination of RBM activities at the chiefdom.

Village Level:
The Village Development Committee will be in charge of coordination of coordination of RBM in the Villages.

Proposed Terms of Reference for the Partnership Structures:
Mobilise and allocate resources.
Develop advocacy tools for resource mobilization
Monitoring and Evaluation
Matching of tasks with comparative advantages.
Identification of new and non-traditional partners
Creating and overseeing the work of various sub committees.
Ensure active community participation at all levels

Baseline Profile of Existing RBM Partnership:
Ministry of Health and Sanitation: Overall provider of health care services.
Multilateral/Bilateral agencies: World Bank: Financial support, African Development Bank: Financial support

UN agencies:
WHO: Capacity building and technical support.
UNICEF: Community based activities and ITN activities.
World Bank: Infrastructural development and capacity building, ITN procurement, storage and distribution, etc
UNDP – part of the founding fathers of RBM

NGOs:

IMC: ITN distribution, Support to IPT activities, Case management, at primary and secondary level, Infrastructure Development, distribution of essential drugs and support to MCH/FP and EPI.

MSF (Belgium, Holland, and France): Drugs and Case management and Operational research (e.g. efficacy study)

World Vision Int'l Infrastructure Development, Capacity building, essential drugs distribution and support case management, ITN distributions

MERLIN: ITN distribution, Case management at both primary and secondary levels and capacity building.

SLRC: Infrastructure development, ITN distribution, support primary health care and capacity building at community levels.

CCF: Distribution of ITN, support case management, support capacity building at PHU and community levels, Infrastructure Development and support IEC activities.

Concern World Wide ITN distribution

Goal ITNs distribution.

MENTOR- ITM evaluation at the community level through insecticide impregnated plastic roof sheeting.

TERRA TECH Infrastructure development and provision of drugs.

Action for Development -Sierra Leone: Activities include ITN Social Marketing and capacity building.

CADHI: Environmental management and social mobilisation

CHEP: Community mobilisation.

Rotary International: Health promotion and ITN supply and distribution

CARE: Interested in Social Marketing of ITNs supply and distribution

UNHCR: Health care services delivery and ITN distribution in camps

UMCOR: Health facility support, IEC and ITN supply and distribution

Potential Partners Not Actively Supporting / Involved In /or Integrated With RBM Activities:

Intra-Sectoral: Focus on an integrated approach: DPC, IMCI, EPI, IEC, RH, IDSR School Health, HIV/TB/MAL Global Fund, Environmental Health, Drugs and Supplies (Pharmacy Board).

Intersectoral: Agriculture, Finance, MODEP, Education, Information and Broadcasting.

Academic /Research Institutions: USL, MRC, SLMDA, Nurses Association

Public-Private Sectors: Chamber of Commerce, Sierra Leone state Lottery, Banks, Pharmacies, Private Clinics/hospitals, Private companies (Sierra Rutile, Branch Energy, Rex Mining company etc).

***Bilateral/Multilateral*:** EU/ECHO, USAID, DIFID.

Diplomatic Missions: All embassies, high commissions and consulates

Community: Civil society, VDCs, Traditional healers, patent medicine sellers (PMS), TBAs, Faith organisations, women's groups (FAWE, Women's cooperatives).

Annexe 2: Cross-cutting issues for Monitoring and Evaluation / Operational Research in RBM Implementation:

Disease Management:
- Monitoring of training activities at all levels
- Monitoring of service provision at facility, community and home levels
- Monitor acceptability of policy
- Monitor implementation of reviewed policy guidelines
- Monitor accessibility to care
- Monitor morbidity and mortality (under five)

Disease Prevention:
- ITNs
  - Quality assurance of ITNs e.g. the nets, insecticides, and re-treatment process
  - Monitor coverage of ITNs
  - Monitor impact of ITNs usage e.g. on morbidity and mortality
- IPT in Pregnancy
  - Assess KAP on the above
  - Efficacy of various IPT antimalarial drugs / intermittent treatment (including integrated micro-nutrient supplementation for malaria)
  - Monitor policy on IPT
- Vector Control / Personal Protection:
  - Monitor implementation of various environmental protection sanitation bye-laws
  - Impact assessment of environmental management / personal protection activities on malaria control e.g. vector density
  - Monitor intersectoral collaboration among relevant partners

Operational Research:
- Monitor capacity building on operational research
- Monitor utilization trend of research findings
- Monitor impact of utilisation

Partnership strengthening and Programme Management:
- Monitor process of partnership building
- Monitor output of RBM partners and stakeholders
- Monitor level of community ownership of RBM
- Monitor Programme performance

Advocacy, IEC and Mobilisation:
- Monitor quality, quantity and efficacy (process, output, outcome and impact) of IEC materials and advocacy strategies.