

**ZAMBIA ROLL BACK MALARIA CONSULTATIVE MISSION:  
ESSENTIAL ACTIONS TO SUPPORT THE ATTAINMENT OF THE  
ABUJA TARGETS**

**18<sup>th</sup> - 23<sup>rd</sup> January 2004**

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## 1. EXECUTIVE SUMMARY

The Roll Back Malaria Board, representing the global RBM partners, requested the RBM Partnership Secretariat to conduct a series of country consultative missions to determine what additional inputs Category 1 countries would require to support the attainment of the Abuja Targets. The purpose of the country consultative missions is to re-invigorate co-operation between the RBM partnership and countries to support progress towards the Abuja Targets.

Zambia's RBM Partnership has made considerable progress towards meeting several of the Abuja targets, particularly in relation to ITNs and effective case management. Several partners have been involved in the scaling up of ITN coverage, through both the commercial sector and through private sector delivery to vulnerable groups. Effective case management has been strengthened by the introduction in 2003 of artemisinin-based combination therapy, although this has not yet been expanded to all districts and health facilities. ANC attendance is currently high and represents significant potential for scaling up malaria preventive measures for pregnant women. Intermittent Preventive Treatment has only recently been introduced in.

The following essential actions were identified during the country consultative mission:

### **Partnerships and Institutional Capacity**

- Strengthen programme management capacity and sustainability, including NMCC profiling
- Develop and disseminate national policy for malaria control and vector control guidelines
- Raise malaria profile through updating of relevant legislation
- Strengthen NGO and private sector involvement in RBM
- Support resource mobilisation and improved funding flows
- Support partnership strengthening at all levels of the public sector

### **Surveillance systems**

- Improve information systems capacity and infrastructure at all levels
- Strengthen epidemic preparedness, detection and response in 10 epidemic prone districts.
- Strengthen M&E and research, including efficacy of drugs and insecticides
- Improve research documentation and dissemination

### **Case Management**

- Strengthening of Laboratory Diagnostic Services (including RDTs)
- Procurement of ACT for nationwide supply
- Develop mechanism for sustainable, predictable financing and distribution of ACT
- Implement national coverage of Community Based Management of Malaria

### **Vector control**

- Net re-treatment campaigns (Child Health Week, SADC Malaria Day and Africa Malaria Day)
- Expand entomological monitoring and surveillance
- Strengthen district storage and procurement capacity for vector control commodities
- Resource mobilisation for purchase of 260,000 ITNs

### **Health Systems**

- Rapid needs assessment, HR strategy and plan of action
- Support provincial planning meetings and link to central level planning
- Support annual partnership forum for Abuja progress reporting
- IEC and Social Mobilisation
- Finalise and disseminate the malaria communication strategy and implement the plan of action

It should be emphasised that the gaps, resource requirements and essential actions identified are additional and complementary to those currently planned and budgeted for within existing resources in the country, including Global Fund monies.

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### 3. ABBREVIATIONS

ACT	Artemisinin-based Combination Therapy
CBMPCP	Community-based Malaria Prevention and Control Programme
CBoH	Central Board of Health
CHAZ	Church Health Association of Zambia
CQ	Chloroquine
CRS	Catholic Relief Services
DANIDA	Danish International Development Agency
DDT	Dichloro-diphenyl-trichloroethane (insecticide)
DFID	Department for International Development (UK Government)
GFATM	Global Fund against AIDS, TB and Malaria
GoZ	Government of Zambia
HMIS	Health Management Information System
IEC	Information, Education, Communication
IMCI	Integrated Management of Childhood Illness
IPT	Intermittent Preventive Treatment
IRS	Indoor Residual Spraying
IT	Information Technology
ITN	Insecticide Treated Net
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MTEF	Mid-Term Expenditure Framework
NGO	Non-Governmental Organisation
NMCC	National Malaria Co-ordinating Committee
NMCP	National Malaria Control Programme
RBM	Roll Back Malaria
RDT	Rapid Diagnostic Test
REAPING	RBM Essential Actions Products Investment Gaps
SADC	Southern Africa Development Community
SFH	Society for Family Health
SP	Sulphadoxine-Pyrimethamine
SWAp	Sector-Wide Approach
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization
ZDHS	Zambia Demographic and Health Survey

#### 4. INTRODUCTION

The Roll Back Malaria Board representing the global RBM partners requested the RBM Partnership Secretariat to conduct a series of country consultative missions to determine what additional inputs Category 1 countries<sup>1</sup> would require to support the attainment of the Abuja Targets. The RBM Partnership Secretariat requested the Eastern Africa RBM Network – which represents partners in the sub-region – to participate in these country consultative missions.

The purpose of the country consultative missions is to:

- Re-invigorate co-operation between the RBM partnership and countries to support progress towards achieving the Abuja Targets.

The expected outcomes of the missions are:

- Determine the status of RBM implementation in relation to the Abuja plan and targets and the milestones set for the remaining two years of the Abuja plan period
- Identification of the essential actions (beyond those already planned) that need to be implemented during 2004 and 2005 to maximise country action to achieve the Abuja Targets
- A Country Support Package that details the additional investments required to carry out these essential actions

The mission team comprised: Dr. Naawa Sipilanyambe (NMCP Manager), Ms. Patience Kurineri and Ms. Alexandra Lang (RBM Partnership Secretariat), Martin Alilio (NetMark, Washington D.C.), Dr. Andrew Collins (Malaria Consortium East and Southern Africa), Khoti Gausi and John Govere (ICP/MAL/SAMC) and Dr. Solome Bakeera (Malaria Consortium Consultant). Other in-country members of the mission team included: Dr. Fred Masaninga (WHO), Dr. Rory Nefdt (UNICEF), Dr. Abdi Mohamed and Mike Macdonald (USAID), Davies Chinfwembe (MoH), W. Kapelwa (NMCC), Stanley Banda (local consultant).

#### 5. METHODOLOGY

The methodology employed included document review (see Annex 3), interviews with CBoH and Ministry of Health personnel and partners (see Annex 1) and a broad Consensus Meeting of major stakeholders (see Annex 2).

A major product of this Consensus Meeting was a draft version of proposed Essential Actions (EA) towards meeting the Abuja targets and a related Country Support Package. These were reviewed with the NMCP manager and her team and further refined. These EAs were presented to a consensus meeting of major RBM country level partners and next steps agreed on with the Director of Clinical and Diagnostic services and acting Director General, Central Board of Health.

Throughout the mission, all partners approached the work with great application and enthusiasm demonstrating a huge commitment to the fight against malaria. In addition, CBOH and Ministry of Health officials, including the most senior officers, made themselves readily available for consultation and dialogue.

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<sup>1</sup> The RBM Partnership Secretariat categorised African countries into 3 groups. Category One countries are those considered most ready to rapidly scale up the coverage of interventions. Zambia is classed as a Category One country.

## 6. SUMMARY SITUATION ANALYSIS

### 6.1. Malaria transmission and burden

Malaria is endemic in all 9 provinces of Zambia with varying degrees of endemicity ranging from hyper-endemic in hot river valleys to hypo-endemic on the plateaus and around urban areas. A total of 10 districts lying along the main railroad line have been identified as being potentially epidemic prone. A resurgence of malaria in urban area has been noted in recent years. *Plasmodium falciparum* accounts for over 95% of cases and the main vectors are *Anopheles gambiae* species complex and *Anopheles funestus*.

Malaria accounts for a high burden of disease in Zambia with malaria accounting for approximately 37% of all outpatient attendances and up to 50% of cases among children under five years of age. Malaria in pregnant women accounts for 20% of maternal mortality. The RBM baseline survey reported that malaria accounted for 62% of inpatient admissions. There had been a general upward trend in morbidity and mortality from malaria in the years up to 2000, with a tripling of new cases from 121 to 376 per 1,000 population.

### 6.2. Policy and strategy environment and partnerships

Malaria is prioritised in the basic health care package of the National Health Strategic Plan 2001-2005. The National Malaria Control Strategic plan (2001-2005) is in line with Abuja targets. Theme working groups for ITNs and IRS, Case Management, M&E, Epidemic Surveillance, IEC and Operations Research are in place.

Overall there is a very healthy partnership for RBM in Zambia with general acknowledgement by most partners of good working relations. This was reflected during the REAPING mission by the active involvement of various major partners throughout.

The National Malaria task force is an inter-ministerial committee chaired by the Vice President and is the highest political body for RBM in Zambia. It meets on an annual basis. The National RBM Coordinating Committee (NMCC) consists of a wide range of RBM partners and is chaired by the Director of Public Health and Research. This body gives guidance to and coordinates the implementation and evaluation of RBM.

Overall, there is a very healthy policy environment which gives good support to the NMCC in fulfilling its core tasks.

#### *Constraints*

The NMCC recognises that partnerships are essential for its success and feels that there is room for further strengthening of partnerships at all levels of the health system. The main issues noted here were:

- There are about 60 NGOs currently involved in malaria control and effective coordination remains a challenge but this is being addressed through the 'Zambia Malaria Foundation'.
- It was the feeling of the partners that involvement of the private sector in malaria control remains limited. At the same time there is evidence of increasingly active partnerships, e.g. with Konkola Copper Mines, Zambia Sugar, Exxon-Mobile, Cropserv, Ecomed, ChemTalk – some of which are members of the theme groups.

### 6.3. ITNs and other vector control measures

#### *Vector Control Component*

Current major malaria vector control interventions include Indoor Residual Spraying (IRS) and increasing household coverage with Insecticide Treated Nets (ITNs), allied with mass net re-treatment campaigns. Despite program operational and technical challenges such as low coverage of ITNs and inadequate resources, the program currently enjoys government commitment and significant partner and international investment into malaria control.

The Community-based Malaria Prevention and Control Programme (CBMPCP) has been introduced in 52 districts in Zambia with an average coverage of 50% per district. This programme has been important in the distribution of ITNs through revolving fund mechanisms with over 85,000 ITNs distributed countrywide. The programme has recently been decentralised to the districts and has stalled as the districts await guidelines from the MoH on the use of these revolving funds. The NMCP has scaled up ITNs in all the 72 districts by distributing more than 1 million nets countrywide during 2000 to 2003.

Indoor residual spraying campaigns have been extended from an initial two urban centres to a further five urban centres, including Lusaka. There are plans to increase coverage to a total of 10 urban centres and to extend coverage within those centres. Initial results in the towns that have been sprayed have been impressive with signs of reduced malaria incidence rates.

Many partners including the private sector, Non-Governmental Organisations, Donors, other Government ministries, research and training institutions, and religious organisations are involved in the ITN implementation programme. Although the MoH of Zambia acknowledges the contribution of the partners, there are currently no written national ITN guidelines to coordinate and to guide partners' ITN activities. However, national guidelines on the utilisation of DDT and pyrethroid insecticides for IRS are in place and were jointly developed by the Environmental Council of Zambia and the NMCC.

Taking to scale the use of ITNs and protecting 60% of children and pregnant women against malaria in Zambia by the year 2005 is one of the targets of the Abuja Declaration. To achieve the targets in an equitable and sustainable way, ITNs are distributed through a number of mechanisms, depending on the geographic and economic strata and biological vulnerability. These mechanisms range from the promotion of commercial sales and institutional sales to employer-based schemes; a variety of subsidized delivery mechanisms; and finally the distribution of ITNs to the most vulnerable at no cost to the end-user. Within the various subsidised schemes, three are significant. The first of these is the discount voucher scheme for women attending antenatal clinics, who can then purchase ITNs at a reduced cost from local retailers. This scheme operates in urban and peri-urban areas with a vibrant commercial sector. In rural areas, where the vibrant commercial sector is lacking, ITNs are sold directly by the antenatal clinics. The CBMPCP is the third subsidized program. ITNs are delivered free of charge to families registered on social welfare lists (These families often receive regular home visits and other commodities). In this programme ITNs (largely supplied by UNICEF) are delivered through partners such as Zambia Red Cross, the Catholic Diocese, Catholic Relief Services (CRS), and other NGOs to specific families, such as orphan-headed households, people living with AIDS, etc. Finally, there was a one-off free distribution of 75,000 ITNs to four remote districts alongside a recent measles vaccination campaign.

To increase private sector involvement in ITN programmes and to allow wider ITN distribution to more segments of the population, the GoZ removed taxes and tariffs on ITNs and insecticides.

To increase ITN coverage there have been two successful mass re-treatment programmes in the past year, coinciding with national malaria days such as Africa Malaria Day and Child Health week. Over 500,000 treatment kits were distributed during Child Health Week in December 2003. Monitoring of the success of these events is ongoing.

Successive surveys have reported increasing levels of household net ownership with 6% owning at least one ITN in 1996, 10% in 2000 (RBM Baseline) increasing to 27% in 2001-2002 (ZDHS). The ZDHS also recorded 7% of children under the age of five years and 8% of pregnant women sleeping under an ITN. Data on ITN distribution for 2000 to 2003 are shown below but coverage rates are lacking.

Year	2000	2001	2002	2003	Total
Total sum	115891	260861	378090	272462	1027304
Total ITN	38064	100188	145509	123162	406923

#### *Partnership on ITN*

Name of Partner	Responsibility			
	Funding	Procurement	Distribution	IEC
NMCC	√	√	√	√
WHO	√	√		
UNICEF	√	√	√	√
USAID	√	√	√	√
DFID	√			
SFH		√	√	√
GF	√	√		
NGOs	√	√	√	√
CBOH		√	√	√
CHAZ	√	√	√	√

#### *Weaknesses*

ITN supply in Zambia is currently insufficient to meet demand. Re-treatment kits are not available at all health centres. Health centres that do distribute re-treatment kits do not monitor their use and so the actual levels of net re-treatment are unknown. To sustain ITN distribution and regular re-treatment, the ITN supply system should be improved and both mass campaigns and wide availability of individual re-treatment kits should be utilised. Insufficient resources are available to provide enough insecticide to mount large-scale mass net re-treatment, and sufficient nets to support vulnerable groups. The end-user cost of ITNs remains high, despite removal of taxes and tariffs and there is a lack of effective mechanisms to reach vulnerable groups. Quality control, in relation to labelling and net size, identification of whether a net was treated or not, and price regulation were mentioned as concerns.

#### *Opportunities for scaling up ITN use*

The demand for nets is reported to exceed supply. Partnerships to implement ITNs and IRS programmes are strong and political commitment is high. Obligated funds are available in WHO country office and a good working relationship exists among the WHO Country Office, WHO/ICP, SADC and the NMCP. UNICEF has also programmed funds for ITN procurement. In addition, a very successful revolving fund mechanism has been handed over by UNICEF to

the districts. However, this has stalled while the District health offices await guidelines from the CBOH on the utilisation of these funds.

USAID/Netmark is also active in the promotion of private sector expansion with a view to establishing longer term sustainability. However, there is a need for new investment, in addition to the above-mentioned sources, to ensure that supplies meet demand.

SFH, with support from DFID, has been instrumental to the central program. Beyond “Social Marketing” SFH also supports district programmes, the ITN portion of the national ‘malaria during pregnancy’ strategy, and participates in central strategy and policy formulation.

Funds to extend the number of districts covered with IRS and to consolidate the programme in those districts already covered are available.

#### *Threats to scaling up the use of ITN and IRS*

The high levels of subsidy for nets in the public and NGO sector is a potential challenge for the commercial sector. In order to improve rural penetration with commercial ITN sales, private distributors have identified a need to support small local retailers in rural areas with microfinance in order to allow them to purchase adequate quantities of ITNs. Currently, these retailers lack this financial capacity and the distributors are unable to take on this risk through extension of credit facilities.

Efficient local production of nets requires confirmed orders from purchasers, unfortunately this is often not possible as many partners rely on donor funding, which is not guaranteed or easily predictable. Leakage of nets and misuse of nets have been identified as potential threats to the effectiveness of the ITN programme. Inadequate storage capacity for insecticides and ITNs at district levels is a limitation. There is a paucity of information on vector bionomics to support effective malaria vector control. The environmental implications of DDT use are a threat to IRS and there is a need to ensure strict control.

Essential Actions for scaling up are outlined in section 5.

#### **6.4. Access to effective treatment**

Access to effective treatment is combined with delivery of IPT to pregnant women under component 5 of the National Malaria Control five-year strategic plan. The main objectives under this strategy are to achieve nationwide use of an effective antimalarial drug for first line treatment and to reduce morbidity and mortality due to malaria in children under five by the end of 2005. Guidelines for malaria case management are available but it is generally felt that these are not very comprehensive and that they have limited coverage throughout the country. This is currently being addressed by the country partnership and a new set of guidelines have been developed and are awaiting printing.

With increasing resistance to Chloroquine (averaging >30%), Zambia switched antimalarial drug policy in 2003, adopting an artemisinin based combination therapy as first line treatment. SP remains the first line treatment for children under 10kg and pregnant women. While implementing the policy and ensuring country wide coverage, an interim policy of using SP as first line has been adopted. The ACT policy change was first carried out on a pilot basis in 7 districts using stocks of donated Coartem™. A delay in the receipt of GFATM monies led to stock-outs of Coartem™ in these districts and health care providers reverted to using SP. In the past month, 28 of the 72 districts have received stocks of Coartem™ and are in the process of implementing the policy change. An ACT implementation strategy guideline exists and

sensitisation of health workers has occurred in all 72 districts. Criteria for choice of districts in the scaling-up process are based on incidence, infrastructure, and estimated level of SP clinical failure rate. Due to delays in the flow of funds the original timeline is now one year behind schedule. Those districts not using Coartem™ are still using SP. Patients given Coartem™ are required to have a laboratory diagnosis to confirm malaria before it is prescribed, although in some cases it can be given on clinical basis.

### *Challenges*

The change to Coartem™, which is approximately 10 times more expensive than a course of Chloroquine or SP, has brought its own challenges including:

- Scaling up coverage at an accelerated rate to ensure country wide coverage and sustained supplies up until and beyond the end of 2005.
- Poor coverage and cost of laboratory services limiting access to effective treatment and potentially increasing the risk of dispensing unnecessary doses.
- Clearly defining the role of costly rapid diagnostic tests (US\$ 0.50 plus) i.e. level at which it can be used, most appropriate time of year, etc.
- Implications for use in home based management of fever, given the expense of the drug
- Avoiding leakage of this costly drug from the implementing districts to non-implementing districts or neighbouring countries where the opportunity to sell the drug exists.

It was pointed out during the visit by certain partners that stock outs of SP are frequent in districts where it is the first line antimalarial treatment. This has occurred despite there being adequate stocks (three years supply) of SP at national level and indicates problems in drug management information systems at district and central levels. This issue will be important to tackle in order to ensure access to treatment on a continuous basis.

To improve access to treatment, the NMCC is committed to bringing treatment closer to the household through home based management. In recognition of the good work being carried out by neighbourhood health committees and community health workers, the NMCC plans to scale up the training of these community health workers<sup>2</sup>.

Plans are in place to make the new first line treatment available at community level in seven districts initially, followed by expansion to the remaining districts after incorporation of lessons learnt during the pilot implementation. Training of these community health workers needs to be coordinated with IMCI training. Coverage for IMCI is still very low in the country with less than 34 of the 72 districts implementing it and only 23 implementing various aspects of the community component. Progress is slow enough to discourage investment by the NMCC in this strategy to ensure community prevention and management of malaria.

Access to laboratory diagnosis is limited. The use of more expensive anti-malarials as first line treatment calls for a more rational approach to drug use and a greater reliance on laboratory diagnosis. Improved diagnosis is a distinct component of the five-year strategic plan. The main objectives are to increase the number of diagnostic centres and to ensure that existing laboratories are well staffed and well equipped. In addition, there are plans for introduction of a quality control system. GFATM funds have been earmarked to help address the above issues and plans are in place to introduce rapid diagnostic tests to improve diagnosis. However, the GFATM funding is not sufficient and extra resources are needed.

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<sup>2</sup> Currently, these community workers are in 52 districts but with an average coverage of 50% per district

## 6.5. Malaria in pregnancy

The overall goal for the malaria in pregnancy strategy is to ensure prompt, effective and safe treatment and prophylaxis with the objective of reducing mortality in pregnant women due to malaria by 25% at the end of 2005<sup>3</sup>. This has been modified to Intermittent Preventive Treatment with the target of 60% coverage in line with the Abuja targets. The other main strategy is to increase coverage of pregnant women sleeping under an ITN.

Antenatal coverage stands at 93 per cent with 72 per cent of women attending antenatal clinic four times. High antenatal attendance figures offer significant potential to achieve high coverage rates of IPT.

There is a comprehensive 'Malaria in Pregnancy Strategy' and attempts have been made to ensure that ITNs and IPT are integrated into routine antenatal services.

### *IPT*

Until 2002, the NMCC was carrying out a programme of Chloroquine prophylaxis during pregnancy. With increasing levels of CQ resistance, this was phased out. In the past 6 months, the NMCC has initiated a programme of intermittent preventive treatment with SP being given three times during pregnancy. Training has been carried out in all 72 districts with full coverage of all health facilities.

Monitoring and implementation of the IPT policy is required. There is currently no means of collecting the appropriate data for IPT M&E through the routine HMIS, although plans are in place to include IPT in the report forms. Another issue that threatens the implementation of IPT are the reported stock-outs of SP in peripheral health centres. This can arise from poor communication infrastructure and weak drug management systems.

The current first line treatment for malaria in pregnancy is SP. Quinine is used in the case of SP treatment failure. Increasing levels of parasite resistance SP pose a difficult question of what are the future therapeutic options for malaria in pregnancy, a question that is shared by many countries throughout Africa.

## 6.6. Supportive strategies

### *Monitoring and evaluation*

A concerted effort has been made to strengthen the routine HMIS systems in Zambia. However, these systems remain weak. HMIS reporting to National level is on a quarterly basis and malaria control indicators are limited to two major indicators - malaria incidence and case fatality. This information does not meet the planning or monitoring needs of the NMCC. The NMCC have set up a malaria information system based on 10 sentinel sites throughout the country. The functioning of these sites is not yet optimal. All of the partners interviewed agreed that many interventions have been put in place over the past 3 years –especially increasing the availability of ITNs through various mechanisms. All agree that there are insufficient M&E systems to be able to measure progress. Therefore it is not possible to routinely assess household coverage of ITNs, IPT uptake in antenatal clinics or access to effective case management. There is a need to include IPT in the HMIS forms and database. In addition, many interventions are being carried out by NGOs and other smaller organisations without proper evaluation of their effectiveness or documentation of successes for sharing with other partners.

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<sup>3</sup> Government of the Republic of Zambia 'Strategic Plan for Rolling Back Malaria in Zambia 2001-2005, p.41.'

Another problem identified is the use of various databases using different software programmes – intended to support information needs for different partners – but creating substantially more work for those inputting data at lower levels.

An overarching consideration in the functioning and use of M&E systems is the human capacity element in terms of data collection, collation and capacity to utilise it properly at district levels for planning purposes.

#### *Communication*

While the NMCC and various partners have succeeded in producing many forms of IEC materials, there is a strong feeling that communications remains a weak point within the programme. This ranges from IEC to behavioural change to sharing of information relating to malaria control between various partners at various levels of the decentralised health system. Weak communications infrastructure exacerbates this problem.

### **6.7. Malaria control and health systems**

#### *Organisation of malaria control*

The NMCC is a part of the CBOH under the Director of Clinical Services and Research, who in turn reports to the Director General. The NMCC is housed separately from the CBOH and the MoH with good infrastructure, adequate office space and well-equipped offices in terms of access to information technology. With support from USAID, upgrading and expansion of the current infrastructure has already commenced.

The NMCC sees its role in malaria shifting from an emphasis on direct implementation to one of interpreting national policy on malaria control, identifying best practices, conducting/implementing operations research and finally handing over tested control intervention to districts and helping them to adapt it to local circumstances.

#### *Health systems development*

Health sector reform in Zambia has progressed over the past 10 years. This has been characterised by ongoing decentralisation of health services to district level, supported by funding from a common basket to which government and donors contribute. At National level government has been progressing towards full implementation of Sector Wide Approaches with co-operating partners. The NMCC recognises the need to be more active in SWAp mechanisms but remains constrained by the current positioning of the programme within the MoH/CBOH structure and by its inability to manage and utilise various databases in order to prepare reports for presentation at these fora.

#### *Human resources*

There is a severe human resource shortage at all levels of the health system in Zambia, which in turn affects all aspects of malaria control implementation. In recognition of this the Government has formed strategic partnerships with the NGO sector, especially the Church Health Association of Zambia (CHAZ) to assist in the delivery of services. This partnership has been backed with funding commitments. In addition, there is a strategy to retain trained personnel in rural areas. Currently there is a freeze on recruitment apart from an exemption for critical positions.

At National Level the NMCC has 12 staff and is supported by two technical advisors, from WHO and Boston University respectively. While most positions are filled, there are some gaps. These include the recently vacated NMCC co-ordinator's position, a data manager and an

epidemiologist. The medical officer in charge of case management is currently acting as the co-ordinator.

At provincial level, the provincial director of clinical care is responsible for malaria control, along with other communicable diseases. Their task is to monitor implementation at district level and give some technical assistance. It is well acknowledged that the capacity of the Provincial Health office is weak in terms of being able to offer adequate support to districts for malaria control and other communicable diseases. During recent times, there has been more interest among the CBOH and co-operating partners to strengthen these offices with support being given by Development Cooperation Ireland, Royal Netherlands Embassy and DANIDA.

Malaria focal points are present at provincial and district levels and have been trained recently in malaria diagnosis and treatment. Malaria task forces are supposed to be in place in all districts but the mission team did not obtain good evidence of their effective functioning. Environmental health technicians play a key role in malaria prevention at health facility level. Discussions are underway among partners, especially WHO, UNICEF and USAID, to identify technical and financial resources to support the pre-service and in-service training for this important cadre.

At community level the Ministry and other NGOs have neighbourhood health committees and trained community health workers who deal with malaria prevention and management. Prior to the drug policy change, these workers distributed Chloroquine at community level.

The NMCC also acknowledges the need to improve capacity at provincial and district levels for planning and monitoring of malaria control activities.

#### *Logistics*

While the NMCC has adequate transport and logistics such as IT, there are critical shortages at lower levels affecting service delivery and support supervision. The Ministry of Health and co-operating partners are trying to address these shortages through the SWAp mechanism. In addition, individual partners are supporting logistical support to the provinces.

Drug information and management systems remain weak leading to stock-outs of first line anti-malarials at health facility level despite adequate supplies at central level. This issue will become more critical with introduction of ACTs that have relatively short shelf lives (less than two years). It is felt that installation of radio call equipment in the NMCC will help to ensure that stock outs of antimalarials in the peripheral health units can be addressed more efficiently. It will still be important to address the overall systems' communication and response to stock-outs at the same time.

#### *Financial resources*

The Medium Term Expenditure Framework (MTEF) – a financial tool – has recently been introduced and spells out spending priorities for the health sector at national level over a period of three years. It also links the central level of planning to district level. The attainment of Millennium Development Goals<sup>4</sup> determines prioritisation of allocated health sector funds. Funding to the NMCC is earmarked. Overall resource constraints<sup>5</sup> are likely to affect the total envelope for malaria control.

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<sup>4</sup> Goal 6 / Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases. Indicator - Proportion of population in malaria risk areas using effective malaria prevention and treatment measures.

<sup>5</sup> Estimated total resource gap for service delivery within the Basic Health Care Package is US \$ 9.00 per capita.

The GoZ favours a “basket type” approach, as opposed to the project support approach to funding. The main reasons given are: the need for a common framework for planning, reporting and evaluation; maximizing use of limited human resources; ability to consider the priorities of the health sector in tandem and more flexibility to move national strategic plans forward. A number of funding partners remain outside of this framework.

The NMCC benefits from funding from the Highly Indebted Poor Countries initiative.

Zambia has received US\$ 4.65 million as part of the overall funding of US\$ 39.3 million for its successful five year Global Fund proposal. This money supports infrastructural development of the NMCC, the introduction of ACTs, improved diagnostics, improved management of severe malaria, establishment of a drug monitoring system, expansion of the IRS programme and procurement of ITNs.

Other sources of funding for RBM include, the CBOH district basket funding, funding directly to districts and communities from partners, funding to NGOs, church organisations, and CBOs through their own established mechanisms. There is also a fund at community level called the Community Health Innovation Fund which comes from the CBOH and provides small grants to communities for innovative interventions.

Despite these various sources of funding, there is still a shortfall in funds to reach the Abuja Targets, partly due to the delay in Global Funds reaching the country, which set planned interventions back by one year. The main shortfalls are related to the procurement of ACTs and ITNs.

## 7. ABUJA TARGETS – WILL THEY BE MET?

The National Malaria Strategic Plan and Abuja 2005 targets are:

- 60% of under-fives and pregnant women sleeping under ITNs by 2005.
- 60% of pregnant women receiving IPT1 and IPT2 by 2005.
- 60% of under-fives with fever receiving effective treatment within 24 hours by 2005.

Due to the lack of empirical data and models that would allow us to make firm estimates, the estimates given below should be interpreted as broad indications. Moreover, the estimates share a number of assumptions which are:

- Commitments made to procure essential commodities are honoured during the remaining period to Abuja
- Continued collaborative partnership between all RBM stakeholders
- Improved and sustained co-ordination of all RBM activities

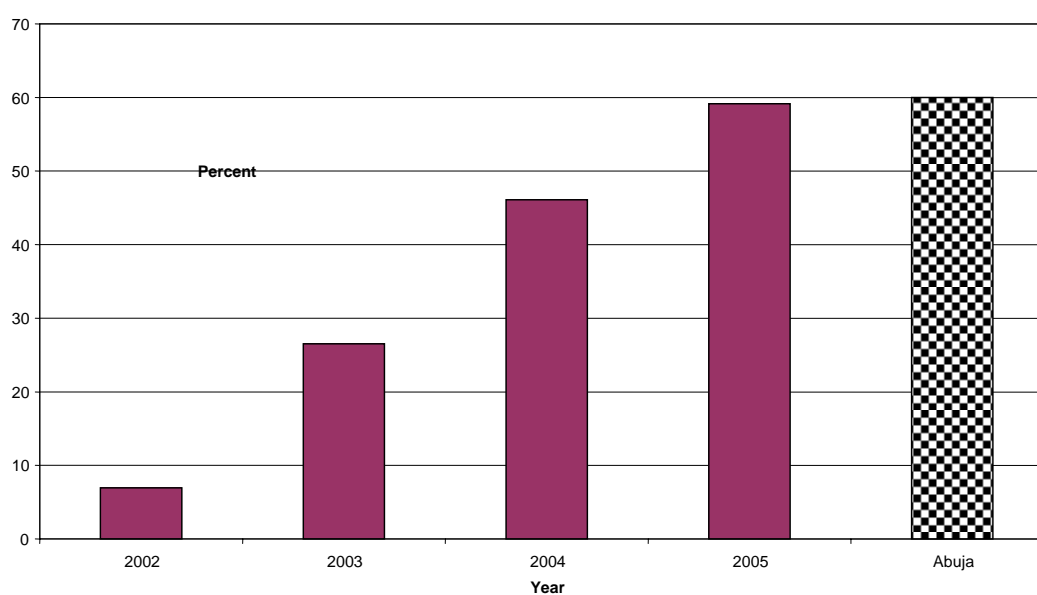
### 7.1. ITN coverage among under-fives

It is evident from the database for ITNs and nets that there are large quantities of nets entering the country. It is estimated that by the end of 2005, 60% of under-fives will be sleeping under an insecticide-treated mosquito net if the following occurs:

Year	Assumptions and actions
2002	<ul style="list-style-type: none"> <li>• Coverage was estimated based on available data from the DHS, and ITN database</li> <li>• Coverage is 6.5 %.</li> </ul>
2003	<ul style="list-style-type: none"> <li>• Supply of 600,000 ITNs through various programmes – Society for Family Health, UNICEF, community revolving funds</li> </ul>

	<ul style="list-style-type: none"> <li>• Programmes targeting vulnerable groups including children under 5 years and pregnant women</li> <li>• Free net re-treatment programme during SADC week and UNICEF child health campaigns</li> <li>• However ITNs from global funds have not yet been dispersed</li> <li>• Coverage increases to 40 %.</li> </ul>
2004	<ul style="list-style-type: none"> <li>• Existing programmes increase their supply and donors honour pledged funds</li> <li>• Extra nets through global funds</li> <li>• Repeat of free net re-treatment campaign</li> <li>• Communication strategy developed and disseminated leading to use of ITNs within the household by children under five years</li> <li>• Increasing share of market by long lasting ITNS</li> <li>• Slow down in distribution owing to handover to ITN programme to districts</li> <li>• Coverage increases to 46 %.</li> </ul>
2005	<ul style="list-style-type: none"> <li>• All existing programmes continue to maintain or increase their supplies</li> <li>• Continuation of free net retreatment campaign</li> <li>• Communications strategy leads to increased demands</li> <li>• Trained community health workers increase demand for ITNs</li> <li>• ITN procurement at district level fully operational leading to greater availability of nets</li> <li>• More nets mobilised through new partners as a result of advocacy</li> <li>• Coverage increases to 60 %.</li> </ul>

**Percentage of under-fives sleeping under an insecticide-treated net**



A major assumption here is that more ITNs are made available through new funding sources as a result of the REAPING exercise.

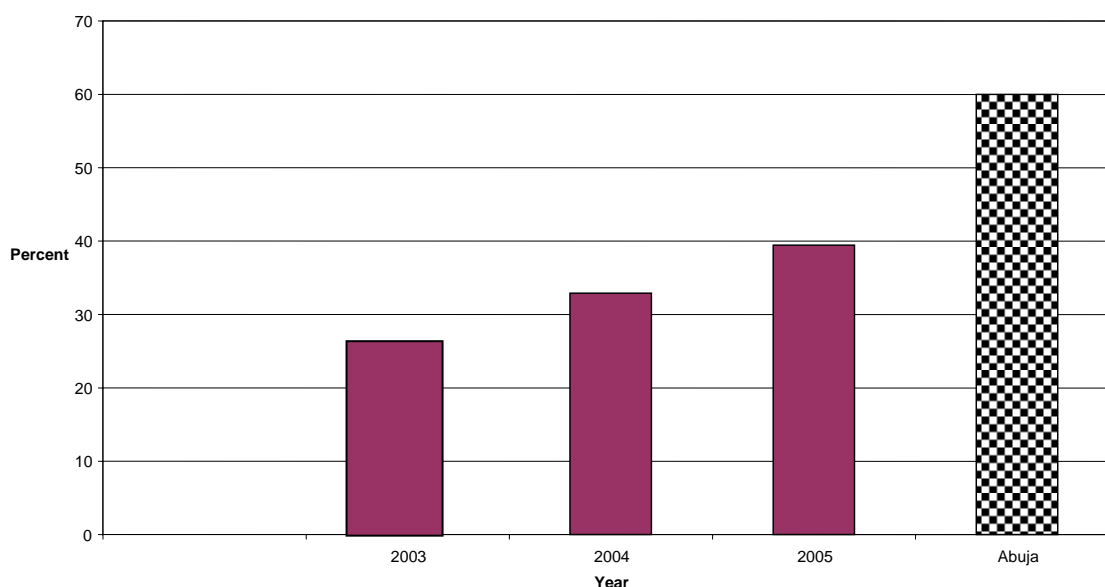
## **7.2. IPT coverage among pregnant women**

Estimation of IPT coverage is more difficult as this initiative has just commenced. Monitoring tools have been developed and piloted in several districts. These have just recently been distributed nationwide. Comprehensive national data should be available from January 2004. Estimates below are based on the presumption that all of the 72 districts sensitised on IPT are actually able to carry it out in terms of drug supply and ability to carry out directly observed treatment. This will need verification. While ANC attendance is very high with most women making up to 4 visits in a pregnancy, it was not clear how early women present, which will have implications for their ability to complete the recommended three doses of IPT.

It is estimated that by the end of 2005, 40% of pregnant women will be receiving 3 doses of IPT (IPT1, IPT2 and IPT3) if the following occurs:

Year	Assumptions and actions
2003	<ul style="list-style-type: none"> <li>• IPT initiated in all health facilities following sensitisation and training in mid 2003</li> <li>• IPT (1,2,3) coverage estimated at 30%</li> </ul>
2004	<ul style="list-style-type: none"> <li>• Current ANC attendance is maintained</li> <li>• Stocks of SP are regular</li> <li>• Support supervision and monitoring exercises to health facilities improves health worker management and recording</li> <li>• Communication strategy increases attendance by mothers and compliance with full course</li> <li>• Coverage increases to 35%.</li> </ul>
2005	<ul style="list-style-type: none"> <li>• Stocks of SP maintained</li> <li>• Sensitivity of parasite to SP does not reach high levels</li> <li>• Communication campaign increases mother compliance and earlier attendance at ANC</li> <li>• Coverage stays at 40%.</li> </ul>

**Percentage of pregnant women receiving IPT1, IPT 2 and IPT 3**



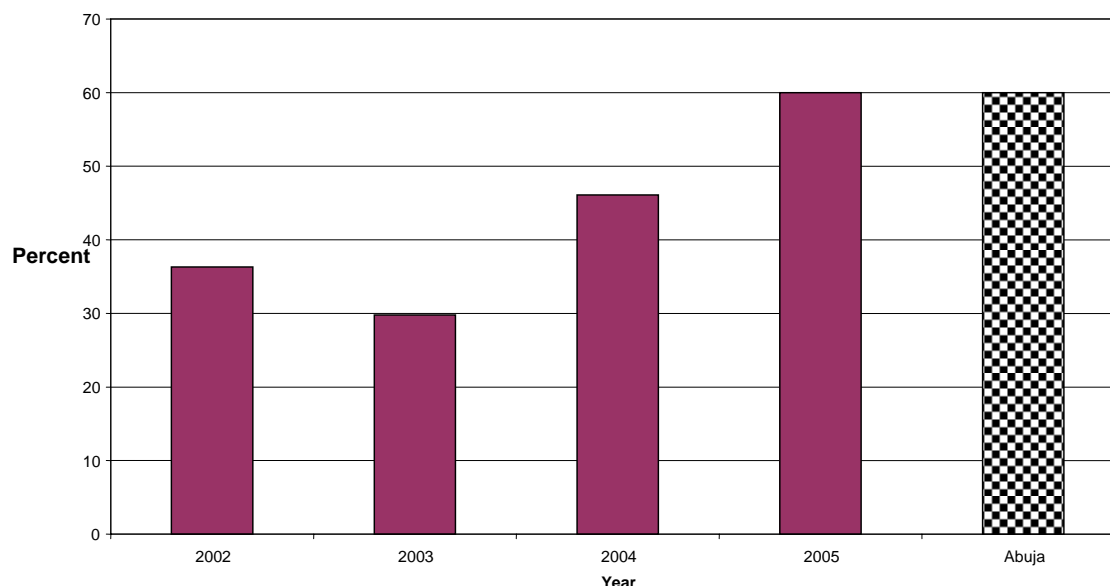
### 7.3. Access to effective treatment for under-fives

It is estimated that by the end of 2005, 60% of under-fives with fever will be receiving effective treatment within 24 hours if the following occurs:

Year	Assumptions and actions
2002	<ul style="list-style-type: none"> <li>• Coverage was estimated based on available data from DHS 2001-2</li> <li>• Coverage is 36.8%.</li> </ul>
2003	<ul style="list-style-type: none"> <li>• Change in drug policy to ACT (SP used as an interim measure and for children under 10kg)</li> <li>• Training of health workers on case management in preparation for new policy</li> <li>• Stock outs of Coartem© occur in pilot districts</li> <li>• No further community treatment due to withdrawal of chloroquine</li> <li>• Coverage reduces to 30%.</li> </ul>
2004	<ul style="list-style-type: none"> <li>• Adequate stocks of Coartem© procured with scale up to whole country</li> <li>• Coartem© use allowed in children under 10kgs body weight</li> <li>• Increased access to diagnostic services improves utilisation</li> </ul>

	<ul style="list-style-type: none"> <li>• Communication strategy implemented with increase in care seeking behaviour</li> <li>• Coverage increases to 45%.</li> </ul>
2005	<ul style="list-style-type: none"> <li>• Stocks of Coartem© maintained with improved drug management</li> <li>• Coartem© made available at community level in pilot districts</li> <li>• Increasing coverage of behavioural change interventions</li> <li>• Coverage increases to 60%.</li> </ul>

**Percentage of under-fives receiving effective treatment within 24 hours**



## 8. THE ESSENTIAL ACTIONS

The essential actions given below are those deemed necessary by the RBM Country partnership, mission team members and the RBM Secretariat to accelerate implementation and reach the coverage rates given in the previous section.

It should be emphasised that these essential actions only include those that are not currently planned and budgeted for within existing resources in the country, including Global Fund monies.

### 8.1. Institutional Arrangements, Policy and Strategy

A recently commissioned report reviewed the capacity of the NMCC and has shown that in order for it to access and utilize existing resources (such as Global Funds) to achieve its aim of rapidly scaling up malaria control activities, a number of institutional changes need to take place. These changes will enable the NMCC in Zambia to properly fulfill its mandate and bring it in line with other programmes in the Southern African region. The need to reposition the NMCC could take advantage of the ongoing review of the Health Services' Act.

Other changes include revision of the legislative framework, such as the Public Health Act, as well as updating or repealing outdated laws. It will also provide an opportunity to improve the profile of malaria through the process.

The programme recognizes the need to increase its capacity through the development of partnerships at all levels within the public sector and between the public sector and NGOs. A

Country Partnership Advisor will be recruited to assist in the enhancement of RBM partnerships at all levels.

Currently, there is no policy framework document to guide implementation of vector control, especially the distribution of ITNs. The development and implementation of a policy is seen as an essential action to ensure that all partners work in unity towards achieving National and Abuja goals.

In order to improve utilization of ITNs and increase access to and appropriate use of effective treatment and IPT, there is a need for a communication strategy to be developed based on existing materials and experiences. Once consensus is gained, this strategy must be implemented at all levels.

## **8.2. Vector Control**

Essential actions for vector control aim at increasing and maintaining personal protection against malaria with appropriate and effective vector control methods.

In order to maintain progress towards the Abuja targets for ITN coverage, the regular re-treatment of the existing crop of nets must be maintained. The most strategic time to do this is in December, just prior to the main transmission season, taking advantage of child health campaigns and the SADC malaria week. This is seen as a time limited activity, given that long-lasting insecticidal nets, which do not require re-treatment are increasingly becoming available.

Despite increased resource mobilization for ITNs through the Global Fund and contributions from various co-operating partners, a shortfall exists in funding for 2005 to supply enough ITNs to meet the Abuja coverage targets.

Monitoring of vector control methods is essential to detect changes in sensitivity patterns of malaria vectors to insecticides used for IRS and mosquito net treatment. Resources are required to build the capacity of personnel to perform this exercise.

## **8.3. Surveillance Systems**

A key issue in reaching the Abuja targets is the ability of the programme to monitor progress, detect impeding factors and take appropriate action. Such information is important at all levels of the health system.

Currently, a lot of information exists from various sources in terms of implementation processes such as the number of ITNs going out into the community. At the same time information regarding progress on the indicators for Abuja is missing.

The essential actions in this section aim at ensuring that adequate capacity to manage information for planning exists and that this information is communicated well between various levels of the health system. Such information can be used for advocacy purposes and mobilization of further resources. UNICEF, Netmark and SFH are discussing the possibility of funding an interim population based survey to collect data to inform a mid-term review of the strategy in 2004 or 2005. The next DHS Zambia scheduled for about 2006 is an opportunity to provide evaluation of progress towards the Abuja targets.

In addition, it has been noted that there is a need to strengthen tactical M&E and research including efficacy of drugs and insecticides as well as community effectiveness of chemotherapy and vector control. It has also been noted that there are a number of epidemic

prone districts in the country where, due to delays in detection, action is taken too late to avoid morbidity and mortality. This will require an improvement in the early detection and response system.

#### **8.4. Case Management**

With change in drug policy to a more effective but expensive artemisinin based combination therapy (ACT), an immediate issue for scaling up is meeting supply needs in a sustainable manner. At the same time there is a need to develop a costed strategic plan, which predicts future resource needs, to present to partners.

Currently, treatment with ACTs depends on confirmation of parasites in the blood. A critical action in improving access to effective treatment is to increase coverage of diagnostic services including the use of Rapid Diagnostic Tests (RDTs). Procurement of equipment, such as microscopes and laboratory reagents, should be co-ordinated with that of other programmes to avoid unnecessary duplication.

Home based management of malaria provides another strategy for improving access to treatment. Existing community health worker networks concerned with prevention of malaria will be expanded. However, substantial questions need to be answered about making ACTs available at community level including cost and risk of resistance developing.

#### **8.5. Health Systems**

All agree that there is need to strengthen capacity at all levels for malaria control, including supporting provincial planning meetings to ensure inclusion of effective malaria control interventions in district plans and linking this to central level planning. There is a need to assess current human capacity for malaria control with a view to developing and implementing a comprehensive strategy and action plan.

Any capacity building at provincial and district levels should be done in close liaison with the provincial health teams along with the technical advisors placed at this level by the CBOH and co-operating partners to avoid duplication.

In addition, it is critical that support is given to annual partnership forum to allow dissemination of progress reports on Abuja indicators.

## 9. PROPOSED COUNTRY SUPPORT PACKAGE: ESSENTIAL ACTIONS AND INVESTMENTS REQUIRED ZAMBIA

(Cost estimates are only indicative)

Essential actions	Level of priority	Products	Investments needed						Meeting the Gap
			Human resources	Commodities	Equipment	Cost 2004	Cost 2005	Total Cost	
<b>Partnerships and Institutional Capacity</b>									
Strengthen programme management capacity and sustainability and bring NMCC positioning in line with regional norms	3	Strengthened capacity and responsibility of NMCC to implement programmes and to access and utilise resources	TA (international and local)	N/A	N/A	50,000	50,000	100,000	
Develop and disseminate national policy for malaria control and vector control guidelines	3	Consensus reached on National Policy for malaria and guidelines on vector control incl ITNs, IRS, Larval Control etc. (IVM) and policy communicated to lower levels of health sector	Consultant and partners	Printed materials	N/A	25,000	5,250	30,250	
Raise Malaria Profile through updating of relevant legislation (Revise Malaria portion of Public Health Act, Statutory Instruments and Repeal Malaria Extermination Act)	2	Upgraded malaria profile and revised legislation	Technical assistance	N/A	N/A	20,000		20,000	
Strengthen NGO & Private Sector involvement in RBM	2	Improved coordinated involvement of NGO and private sectors in malaria control	Country Partnership Advisor	N/A	N/A				
Support for Resource Mobilisation and improving funding flows	2	Improved capacity for resource mobilisation and funding flow	CPA & NMCC & TA	N/A	N/A	50,000	50,000	100,000	
Support to Strengthening Partnerships at all levels of the public sector	1	Improved functioning of RBM partnership at all levels for better malaria control	Country PA			100,000	100,000	200,000	RBM Secretariat
<b>Surveillance systems</b>									
Improve capacity and infrastructure for information systems at national, provincial and district levels including drug stock management and pharmacovigilance	3	National surveillance database	TA for training	Training materials	Radio calls, computers, PDA, internet connection				Malaria consortium and others

Strengthen epidemic preparedness, detection and response in 10 epidemic prone districts.	2	Capacity for training in epidemic preparedness in place	Training (TOT and District rapid Response Teams)	RDTs, Buffer Coartem® SP, Insecticides	Spray Pumps	250,000	453,400	703,400	WHO /UNICEF (\$255,000), the funding gap is \$448,400
Strengthening M&E and research including efficacy of drugs and insecticides and community effectiveness of chemotherapy and vector control	1	Survey report and capacity to monitor M & E activities enhanced	Hire surveyors/ Develop protocols / KAP Surveys	Stationery, Computer and Printing, communication, fuel	N/A		40,000	40,000 <sup>6</sup>	UNICEF and Partners
Improve research documentation and dissemination	1	Effective info flow to central place	Data manager in place	Radios			200,000	200,000	USAID/MOH/UNICEF
<b>Case Management</b>									
Strengthening of Laboratory Diagnostic Services (including RDTs)	3	Improved quality of diagnosis			Microscopes	430,000	441,000	871,000	Research
Procurement of ACT for nationwide supply	3	Sufficient supplies of ACTs available in country to meet demands	N/A	ACTs	N/A	5,000,000	5,000,000	10,000,000	
Develop mechanism for sustainable, predictable financing and drug distribution of ACT (i.e. Saleable Strategic plan, cost sharing, private/public partnership)	3	ACTs available in-country in a sustainable manner	TA						Advocacy partners
Update, disseminate and implement strategy and plan of action for nationwide coverage of Community Based Management of Malaria	1	Improved access to malaria case management	Training of HR in 72 districts, TA						
<b>Vector control</b>									
Net retreatment campaigns during malaria commemorative days including Child Health Week, SADC Malaria Day & AMD	3	Increased coverage of ITNs	Existing health sector personnel and NGOs	Net retreatment sachets	Instruction manuals	350,000	350,000	700,000	
Expand Entomological monitoring and surveillance	2	Improve functioning of Monitoring and Evaluation System	Technical assistance, entomological assistants	N/A	Camping equipment, mosquito collection tools, dissecting	15,000	10,000	25,000	

<sup>6</sup> These funds cover the survey alone and not the extra items mentioned in the essential actions

					microscopes				
Strengthening storage capacity in districts for vector control commodities & procurement of commodities for scaling up to additional urban districts	2	Adequate supplies, where and when needed to respond to planned expansion of activities	N/A			6,000	0	6,000	
Resource mobilisation for purchase of 260,000 ITNs	1	Increased coverage of ITNs with in built targeting mechanisms for vulnerable groups	Existing health sector personnel and NGOs	ITNs		50,000	1,250,000	1,300,000	
<b>Health Systems</b>									
Rapid needs assessment and plan of action to improve HR capacity at all levels for malaria control through the development and implementation of a HR strategy and action plan	3	HR strategy developed and plan of action operationalised	TA						Malaria Consortium and others
Support provincial planning meetings to ensure inclusion of effective malaria control interventions in district plans and link these to central level planning	2	Provincial Malaria Planning meetings and guidelines for harmonised Provincial-District Planning and decision-making	TA-CBoH HSP-NMCP	Stationery, communication, fuel	Computers, Land-cruiser (1)	100,000	55,000	155,000	Malaria consortium and others
Support annual partnership forum to allow dissemination of progress reports on Abuja indicators	2	Stake-holder's Progress Report and Review on Abuja targets	CBoH, MOH, NMCC, Partners	Meeting materials	N/A	25,000	25,000	50,000	Malaria consortium and others
<b>IEC and Social Mobilisation</b>									
Finalise and disseminate the malaria communication strategy and implement the plan of action	3	Communication strategy document finalised and operationalised at all levels	TA/ 6 months	Printed materials (guidelines, IEC materials)	N/A	50,000		50,000	WHO and others

Key: Level of priority 3 means Action required immediately and funding not available, 2 means important, partially funded and 1 means Funding may be available from elsewhere

## **10. FOLLOW UP ACTIONS**

- Distribution of Report to key Ministry of Health Officials and Development Partners
- Presentation of report to the Intersectoral Malaria Task Force
- Presentation of report to SADC Malaria Committee to solicit wider support



**11. ANNEX 1. LIST OF PERSONS AND ORGANISATIONS CONSULTED**

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**12. ANNEX 2. AGENDA CONSENSUS MEETING**

1. Opening Remarks
2. Presentation of Methodology and Procedure for the Reaping Mission
3. Presentation of the Draft Essential Actions
4. Discussion and Consensus Development of Key Essential Actions
5. Closing Remarks

### **13. ANNEX 3. DOCUMENTS REVIEWED DURING COUNTRY CONSULTATIVE MISSION**

1. Banda J et al (2003) Uganda Roll Back Malaria Consultative Mission
2. Zambia NMCC / WHO – SAMC (2001) WHO / AFRO SAMC Mission Report
3. RBM (2003) Terms of Reference of Country Visits : Roll Back Malaria Partnership Country Focus Strategy
4. RBM Partnership Secretariat (2003) RBM Partnership Request for Proposals: RBM Country Consultation Missions
5. Malaria Consortium (2003) Proposal to RBM Partnership: RBM Country Consultation Missions
6. Ghebremeskel et al (2003). Eritrea Roll Back Malaria Consultative Mission: Essential Actions to Accelerate and Consolidate Progress in Malaria Control
7. WHO (2000) The Abuja Declaration and the Plan of Action: An Extract from the African Summit on Roll Back Malaria
8. Government of Zambia (2001) Strategic Plan for Rolling Back Malaria in Zambia 2001 – 2005
9. CHESSORE (2001) The Summary Findings of the Zambia Roll Back Malaria (RBM): Baseline Study Report
10. Zambia, MoH (1996) National Strategic Health Plan: Investment Plan (1995 – 1999)
11. Zambia, Ministry of Health (2000) National Health Strategic Plan 2001-2005
12. Zambia, Ministry of Health (1995) National Strategic Health Plan (Investment Plan) 1995-1999
13. Zambia Central Board of Health (2000) National Malaria Control Programme Joint Annual Work Plan, 2001/2002
14. Zambia Central Board of Health (2000) National Malaria Control Programme Roll Back Malaria Joint Annual Work Plan 2003/2004
15. Zambia National Malaria Control Center (2001) Framework For Implementing Anti-Malarial Treatment Policy Change in Zambia
16. Zambia Central Board of Health (1996) Health Management Information System (Indicators)
17. Zambia Central Statistics Office (2000) Zambia Demographic And Health Survey 2001-2002 (Preliminary Report)
18. Zambia National Malaria Control Center (2001) Preliminary Summary Report – Drug Efficacy Studies Conducted In Five Sentinel Sites
19. Zambia National Malaria Control Center (2000) Annual Plan Of Action For Rolling Back Malaria In Zambia 2001
20. Zambia National Malaria Control Center (2000) Strategic Plan For Rolling Back Malaria In Zambia.(2001 Programme Action)
21. Zambia National Malaria Control Center (2001) Baseline Study Undertaken in Ten Sentinel Districts, July to August, 2001
22. Zambia National Malaria Control Center (1999). Strategic Plan For Rolling Back Malaria 2001-2005
23. Zambia MOH (2003) National Health Strategic Plan 2001-2005 (Mid Term Review Report)
24. Zambia National Malaria Control Center (1999) National Malaria Situation Analysis Zambia 2000
25. Zambia National Malaria Control Center (2001) Rolling Back Malaria –A Situation Analysis 2000

26. Zambia RBM Partnership (2003) Desk Review For Roll Back Malaria Essential Actions Progress Investment Gaps (Reaping)
27. Zambia National Malaria Control Center (2001) Roll Back Malaria Partners' Round Table Discussion Meeting Report
28. Zambia MOH (2003) Mid-Term Review Zambia Extract Malaria
29. Zambia RBM Partnership. Terms Of Reference For Country Visits – Roll Back Malaria Partnership Country Focus Strategy