Ministry of Health

A Draft 3-year Implementation Plan

A Road Map for Impact on Malaria in Zambia

Rapid Scale up of Malaria Control Interventions for Impact in Zambia

Foreword

The realization of the United Nations Millennium Development Goals and the attainment the National Health Priorities is the goal of the 2006-2011 National Health Strategic Plan. In this regard, improving service delivery of Primary Health Care interventions, control of diseases of public health and strengthening health systems are cardinal elements of success. The burden of malaria on the population and its impact on the maternal and child prognostic indicators has lead to the classification of malaria control as a national health priority and link to the Millennium Development Goal.

The National Malaria Strategic Plan for 2006-2011 has been developed to provide the Strategic Framework for malaria control using an evidence base to Scale Up malaria control Interventions for Impact. The Essential Package is based on a minimum package of Core Interventions that have been scientifically proven to be effective. It is envisaged that the implementation of this package will be through strengthening existing systems such as Reproductive and Child Health Services. The Core Interventions and Related Strategies are aimed at

1. *Reducing Disease Burden and Mortality through Prevention using* Integrated Vector Management strategies of ITNs and Indoor Residual Spraying and Prevention during Pregnancy.
2. Reducing Disease Burden and Mortality through Caring for the Sick using strategies of effective case management and improved laboratory diagnosis.
3. Integrated Support Systems aimed at strengthening of health systems to effectively deliver malaria control interventions.

The 3 Year Scale Up for Impact document is a plan for rapid scaling up of population coverage of the essential malaria package to levels at which disease and economic burden will be markedly reduced. This is a plan for impact, as measured in deaths, disease, and economic burden. It is also a strong commitment to assess impact and to assure that the scale up programme is strongly evidence-based and has a prominent performance management base to assure highly efficient use of resources. The Plan is integrated with the National Health and Malaria Strategic Plans, and in sequence with the national Medium Term Expenditure Framework Cycle. It is envisaged that this Plan will form the technical base in the development and implementation of the District MTEF Plans.

The National Plan has been developed through a highly consultative process with key financing and technical partners, and the broad array of country implementation partners, and most importantly with the district health teams.
Although the plan is bold, I strongly believe that it is highly feasible to implement it. The plan provides a roadmap for Scaling Up for Impact and its Success is contingent on the national commitment to addressing malaria and the unanimity in the RBM Partnership to rally around the consensus plan and its objective and approaches.

Let me urge us all to take personal responsibility in tackling the problem of malaria in this country and moving towards realizing the Goal of a Malaria Free Future, for all.

Dr.Simon K.Miti
Permanent Secretary
Ministry of Health

Preamble:

The National Malaria Strategic Plan for 2006-2011 represents a bold, evidenced based approach for bringing the enormous health and economic burden of malaria in Zambia under control. Malaria has been the leading cause of childhood death, a major contributor to poor birth outcomes, the leading cause of school and workplace absenteeism, and by far the lead cause of health facility attendance and cost.

Based on well-documented experiences in our neighbour countries in the Africa region, there is confidence that by applying the interventions that we currently have at our disposal, it is possible with high coverage to dramatically decrease health and economic burden of malaria in as short an interval as 24 months.

Our country has demonstrated leadership in addressing malaria during the last year of our current Strategic Plan, 2000 - 2005. It is during this period that we changed our national drug policy in response to clear evidence of wide-spread drug resistance. There is a substantial experience base on the use of Insecticide Treated Nets and Indoor Residual Spraying. Further, we have a strong implementing partnership with antenatal care and child health care. The national RBM Partnership is one of the strongest in the region.

This document is a plan for rapid scaling up of population coverage of the essential malaria package to levels at which disease and economic burden will be markedly reduced. This is a plan for impact, as measured in deaths, disease, and economic burden. It is also a strong commitment to assess impact and to assure that the scale up programme is strongly evidence-based and has a prominent performance management base to assure highly efficient use of resources. The Plan is integrated with the National Health Plan, and in sequence with the national MTEF cycle.

The Plan has been preliminarily costed based on the need, the optimal coverage and rate of programme expansion. There remain many important operational decisions as the plan is implemented as to the rate of expansion of programme coverage and the most cost beneficial mixing of interventions in the essential malaria package.

The National Plan has been developed through a six month consultative process with key financing and technical partners, and the broad array of country implementation partners, and importantly with the district health teams. The plan is bold, but it is highly feasible. Success is contingent on the national commitment to addressing malaria and the unanimity in the RBM Partnership to rally around the consensus plan and its objective and approaches. Highly efficient use of current malaria resources is critical, and the Partnership will need to mobilize additional resources in coming months and years to assure success.

Malaria need not hold back national human and economic development. Our country has an opportunity to dramatically change the course of the history of malaria in the country, and the time is now.

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Cost Drivers of the National Malaria Strategic Plan

The strategic plan intendeds to expand current existing and proven interventions to effectively address the public health priority concern of malaria and related health complications such as may be evidenced in pregnancy and complicated malaria. Malaria continues to impact negatively on the social and economic productivity. Although this impact has yet to be assessed and quantified, it is estimated to be significant and in some terms rated to be as high as 1% of the Gross Domestic Product (GDP) or even higher. The gains therefore over an effective control programme integrated into the public health system is greater than the cost of offsetting the current burden due to malaria. This arises out of internationally available cost – effectiveness information that provides for current estimates. Yet, the challenge in the medium term is to identify, develop and implement systems that are able to provide an analytical framework for providing the needed information for measuring performance assessment and resource use.

Among the various interventions, known to address the burden of malaria are the direct interventions that mitigate the burden of malaria in terms of preventing and promoting health life style regarding malaria control through the provision and utilization of Integrated Vector Management which includes Insecticide Treated Nets (ITNS) and Indoor Residual Spraying (IRS) as well as Intermittent Presumptive Treatment (IPT) of Malaria in Pregnancy (MiP). Additional to this is the clinical management of malaria and diagnosis. Other interventions related to system issues including first and foremost, human resource management and development, storage and distribution, monitoring and evaluation, advocacy and communication for social education and awareness, transportation, diagnosis,/laboratory as well as operations research. As with any health system component or programme/disease control area, the effectiveness and efficiency of the programmes towards the attainment of impact rather than process results depends on the extent to which these factors integrate and are supported in the organization of resources.

The key package of interventions are:

1. ITNs
2. IRS
3. Case Management including diagnosis and MiP.
4. Human resource

Although not a direct intervention, but key in the overall health services provision, human resource provides a significant aspect of all the interventions. In this regard the share of HR towards the overall estimated cost ranks significantly.

Also relatively significant is the aspect of community and household malaria management. The household level is the point of focus for each of the interventions and this has a central role in the programme management.

Operational Designs for the Core Interventions

ITNS

Zambia has in the past five years employed the different mixes of the ITN distribution strategies based on the principle of providing access through market segmentation and differentiation as an ideal ITN approach. While this may ordinarily be the case, the strategy of rapid expansion of malaria interventions have necessitated a review of the strategy. This is against the background that over the previous five years, a level of approximately 14% ITN coverage has been achieved.

In the forthcoming Strategic Plan, the target is to attain a minimum coverage rate of 80% by December 2008. Given this target, it has been found necessary that strategies supportive of distribution efforts targeting mass coverage be adopted.

The Approach of District ITN Mass Distribution

The 2006 to 2011 Strategic plan, has set the target of 80% household coverage. The goal of 80% is to ensure that a minimum threshold of 3 ITNS are available to the household, distributed freely. In this strategy, each district needs will be determined relative to IRS requirements.

The estimation of total ITN requirements takes into account previously distributed ITNS per households, additional ITN requirements to ensure that a minimum of three ITNs are available and that the households benefiting from IRS are excluded from the estimations.

The selection of districts to be covered from the first, second, third - consignments will depend on the following criteria

1. Districts with high malaria incidence
2. Remote rural district
3. Districts with minimal or smaller gaps

Initial Selection Based on Districts with High Incidence of Malaria

HMIS Derived Malaria Incidence in the Highest Ranked 12 Districts	
District	**Incidence**
Shang'ombo	937.8
Luangwa	771.8
Mpongwe	596.2
Chongwe	575.9
Gwembe	540.15
Mongu	521.5
Mansa	520.2
Katete	505.2
Mambwe	505
Chadiza	500

Free ITN Distribution

The key approach to the rapid scale up of the malaria programme will, in the first three years, be dependant on the mass distribution of three free-to-the-user ITNs per household in ach of

the 72 districts. During the previous five years, it is noted that only a 13% coverage has been achieved through attempts to district ITNS based on a cost recovery mechanism.

Sustaining Coverage Through Routine Mechanisms - ANC and EPI Distribution

The continued coverage of the ITN distribution effort will following the initial mass distribution campaign be continuously done through the routine distribution programmes using the EPI and ANC services programmes.

Community Response Programme

The Community Based Malaria Prevention and Control Programme (CBMPCP) whose operating principles are embedded in community ownership and empowerment, will be the basis for a demand driven community programme for ITN distribution and utilisation development.

Supply Consistency and Sustenance – Routine ANC and SPI Distribution

Coverage will be sustained through Routine ANC and EPI distribution for Pregnant women and under fives. This may be at a nominal cost recovery fee.

Mass Cover – Up Campaign

With the strategy of three nets per household free ITN distribution, each district will do a one time mass cover up campaign, but routine ANC and EPI distribution will be on going. SFH still remains the implementing partner for the Malaria In pregnancy ITN component. With the current strategic plan, SFH is expected to strengthen the EPI distribution as well as the ANC distribution. The commercial sector will also compliment the above strategy to sustain coverage. Community level activities are envisaged under the CRAIDS - Community Response to Malaria.

Annual Mass Re-treatment Campaigns

In the current strategic plan, there will be annual mass re-treatment campaigns undertaken. Three months before the actual re-treatment campaign the Central level will work with the Province and the districts to finalise the Micro plans for this very important annual activity.

IRS OPERATIONAL DESIGN

Background:
Zambia has effectively implemented a multiple and integrated approach to malaria vector control with Indoor Residual House Spraying (IRHS) as the one of the main thrusts of the core interventions. Other strategies include, Insecticide Treated Nets (ITNs), Larviciding and Environmental Management.

The IRHS programme has been implemented in the two-copperbelt districts by KCM since 2000.The National Malaria Control Programme (NMCP) adopted this model and had by 2003 replicated it in 5 urban districts. Three additional districts further scaled the programme up, bringing the total number of districts using IRHS to eight in 2004 with household coverage of 217,000. This intervention is envisaged to be rolled out to up to fifteen districts by 2006 with

the household coverage of 424,000 eligible structures. By 2007, the programme is expected to have covered 686,910 eligible structures, which will be maintained through to 2011.

In the current strategic plan, the objective of the IRHS programme is to have at least 85% of people living and sleeping in sprayed structures in eligible areas of a minimum of 15 districts in Zambia, by December 2008.The intervention will be implemented through an annual campaign strategy with increased number of sprayed households, Quality assurance with Environmental safeguards in place.

Eligibility criteria:
IRHS will be target to eligible structures using strictly defined criteria that takes into account the following factors- Geo-location, housing units structure, population density and capacity to handle IRHS effective operations in conformity to national IRHS guidelines:

Geo-location- Eligible geographical areas for IRHS are Urban and Peri-urban areas. Urban areas in this case refer to settlements with characteristic concentrations, residential, commercial and industries where as Peri-urban ones are those on the peripheral of urban settlements in a process of urbanisation. Rural areas relate to the countryside and include agriculture, forested areas and land scapes.

Structural eligibility- any dwelling structure made of permanent or semi-permanent material located in a specified or selected area (Urban or Peri-urban)

Any roofed structure under construction and likely to be occupied in the next six (6) months.
Structural densities- any planned settlement with not less than 25 structures within a radius of three (3) Kms in any given geo-location.

Roll out criteria:
The expansion to selected districts will be confined to those areas where capacities have been built and later be scaled up progressively to additional districts following further capacity building

The selection of districts to be incorporated in the campaign per year will depend on the following criteria

- High malaria incidence based on the Health Information Management System (HIMS).
- Presence of Indoor resting malaria vectors in the targeted districts
- Geographical location of the site – easy accessibility of structures for spraying.
- Mortality and Morbidity rates population and structural densities and structure eligibility. The National Malaria Control Centre will determine whether the eligibility criteria have been satisfied for a given area.

Selected districts for the intervention will be informed and will work with the central level and the provincial Health office to finalise their Micro plans for programmatic stage such as the Needs assessment, Geographical reconnaissance, implementation and Monitoring and evaluation.

Programmatic stages

Indoor Residual House Spraying (IRHS) will be conducted through annual campaigns in selected districts. Community Health workers and Neighbourhood Health Committees will conduct the actual spraying operations under the supervision of DHMTs in targeted districts

Needs assessment:

After the districts are selected on the basis of information from HIMS, a needs assessment will be conducted in the selected districts by National Malaria Control Centre (NMCC). The needs assessment will focus on identifying gaps with regards to human resources, storage facilities and other factors that are pertinent to conducting IRHS in the areas. The needs assessment will also include collecting base-line data on the following:

- Parasitological data

  Parasite prevalence rates (Microscopy or Rapid Diagnostic Tests (RDTs))

- Entomological data

Vector susceptibility, density and identity

- Behaviour and Attitudes

Knowledge and perception (KAP) survey -quantitative data.
Focus Group Discussions (FGDs) survey – qualitative data

- Epidemiological data

MIS and laboratory data (slide positivity rates)

- Environmental impact assessment data

The environmental Council of Zambia will facilitate the EIA, which will include quantities of insecticides in human foods, fauna flora, water, air and soil

- Geographical reconnaissance data

  A geographic reconnaissance will be conducted and will involve, mapping, sampling procedures, determination of the quality, types, sizes, location, accessibility, and other pertinent information on housing and also the habitat and customs of the local population, in relation to the needs of the programme. The presence and location of actual or potential mosquito breeding habitats, the habitats of mosquitoes and any other information considered necessary for planning and conducting mosquito vector control programme. The gathering of such data on population, house communications, maps and entomological and epidemiological information will precede control activities.

Procurement, Storage, Distribution and Disposal arrangements

Central level procurement of IRHS commodities such as insecticides, pumps and other accessories has proved to be the main bottleneck of the timely implementation of this intervention in the country. The sub-component will streamline the procurement process, through subcontracting supply chain management to experienced organizations namely WHO and UNICEF through the NMCC. The storage, distribution and disposal of procured commodities will be in accordance with the provisions of the WHO guidelines on IRHS implementation. Since both sachets and liquid will be utilized, incineration alone does not suffice as a disposal mechanism. The onus of disposal will be vested in the manufacturer who will establish transit storage of DDT. Thus a formal agreement will be entered into between local suppliers and manufacturers with MOH through the NMCC on DDT transit storage and disposal before any tender agreement is signed. There will be adherence to both international and domestic relevant Environmental Safeguard provisions.

Production and distribution of guidelines:

In order to implement a successful IRHS programme in all the 72 districts, a standardised protocol (guidelines) will be developed by the NMCC in order to assist implementation,

monitoring and evaluation of district programmes. Guidelines will be produced for the following: - Storage of IRHS commodities, equipment and accessories, training (TOTs and Cascades), implementation and post spray activities, Information for Education and Communication (IEC) and Environmental Safeguards. Indicators of human health, environmental and social impacts will be developed along-side the guidelines including a provision for mid-term screening of spray operators during the IRHS exercises. The guidelines will be distributed to communities through the PHO which will also undertake monitoring and evaluation of programme activities.

Training of human resources for IRHS

Training of Trainers (ToT) sessions for Environmental Health Technologists as IRHS programme managers, coordinators and supervisors at the point of service delivery will be conducted. By the end of the training exercise, participants will be conversant with operational procedures for IRHS, development of plans of action, spray operators' recruitment procedures, quality assurance, preparation of reports, community sensitisation and EIA and organizing post-spray community meetings.

Cascade training will be conducted at the district level for 21 days to train community members as spray operators, team leaders, storekeepers and equipment maintenance personnel. Participants will be trained on operational modalities, equipment maintenance, insecticide handling and storage, safety measures, bin card maintenance and community sensitisation techniques.

Institutional arrangements

IRHS Programme implementation will be conducted over sixty (60) days through a campaign strategy. Operations will be through DHMTs with the active participation of Community members under the supervision of PHO and NMCC. Since the timing of the spray operations is critical, the IRHS programme will be conducted annually just before the onset of the rain season (September to October). Field coordination of implementation will be subcontracted to either local authorities or private sector (depending on respective comparative advantages) by the DHMTs through the IRHS Programme manager. Acceptability of the programme by community members will be ensured through strengthened Behavioural Change for Communication (BCC). This activity will be subcontracted by the DHMTs to civil society organisations and existing government programmes with a comparative advantage at the community level.

The funds for district programme implementation will be disbursed to districts in accordance with their work plans.

Implementation and Performance assessment

Performance assessment will be conducted through a continuous monitoring and evaluation process facilitated by the NMCC at the national level and the Malaria Control Officer at the provincial level Quality and progress monitoring will be subcontracted to private sector institutions namely KCM, Mopani and Nakambala Sugar under the supervision of the NMCC. NMCC will conduct overall monitoring and evaluation through continuous collection of data on incidence rates, parasite prevalence, entomological and operations performance of the sub-component. Progress reports during the campaign and final reports at the end of the campaign will be prepared by the Programme managers in the districts and will be submitted to NMCC through the malaria control officer at the PHOs. Furthermore, quality will be enhanced through mapping and refining the roles at different levels (NMCC, PHO, DHMTS) of delivery within a decentralized system. Additionally, the role of the private

sector and the Ministry of Local Government and Housing will be progressively increased in delivery of IRHS services. Surveillance on insecticide resistance will form a critical component in IRHS for further quality of the intervention. Therefore, it will be strengthened at different levels (PHO, DMTS etc) through a partnership with research and academic institutions.

Post- spray meetings will be held at the end of each spraying campaign whose main purpose will be to evaluate district performance, information dissemination to stakeholders on IRHS in Zambia and plan for the following year's activities. The post-spray meeting will involve the NMCC, TDRC, WHO, USAID, KCM/MOPANI and Nakambala Sugar. Participants to the post-spray meeting will be drawn from PHO, DHMTs, Local Authorities, NGOs and Private sector organizations.

Environmental Safeguards:
In the course of rapid expansion of IRHS services, it becomes even more critical to ensure that maintaining high standards of supervision, monitoring and evaluating with emphasis on personal and environmental safeguards through improved capacities for waste disposal management and storage. Monitoring and evaluation of malaria control activities using entomological surveillance and conducting operational research to provide relevant information for formulation of evidence based interventions, including post registration monitoring of pesticides use.

Although, DDT is one of the Persistent Organic Pollutants (POPs) it is presently the most effective among the insecticides being utilized for IRHS programme in Zambia. However, DDT is known to impact negatively on the environment and there is an urgent need to find an effective replacement for DDT. In this regard, Zambia has adopted an Integrated approach to vector control in adherence to the WHO guidelines on IVM which emphasizes on reduced dependency on chemical- based interventions whilst addressing the use of increased implementation of non-chemical based approaches and increased research on possible replacements for the POPs. In an effort to find possible replacement for DDT, the National Malaria Control Programme has embarked on research directed towards increased Vector susceptibility studies and Bioassays.

The Implementation process of this research will begin with the Identification of potential insecticides from the WHOPES list of recommended insecticides for Malaria Vector Control as candidates that would be used as alternatives for scaling down DDT usage. The selected Insecticides should meet the provisions of WHOPES characteristics of Safety, efficacy and environmental impact etc. Field trials on these insecticides will be conducted in identified study sites that suit the study criterion in line with the WHO protocols for IRHS implementation, Vector susceptibility and Bioassays. Determine the efficacy of IVM in terms of augmenting IRHS and ITNs with Environmental management and larviciding using biological approaches with active participation of the community.

Case Management Operational Design

Operational Design: Malaria in Pregnancy and Clinical Care

Malaria in Pregnancy

In the MiP sub-strategy of case management, the focus will be targeted towards increasing the uptake of Intermittent Presumptive Treatment (IPT) in the country through a joint commitment to strengthening focused antenatal care. The key emphasis will be to increase coverage of Focussed Ante-Natal Care (FANC), improve patient and provider compliance.

Monitoring and Evaluation activities will be strengthened in order to capture information on compliance after the first dose. This strategic decision will further seek to improve the quality of care and completion of the IPT course. The implementation will be done according to the MIP guidelines. The strategic interventions to be used in the programme will compromise.

Malaria accounts for 20% of maternal deaths in Zambia. Malaria has other effects on the pregnant mother such as anaemia and increased chance of HIV transmission from mother to child. The negative effects of malaria in pregnancy are also passed to the unborn child, resulting in intra-uterine foetal death, low birth weight, miscarriages.

In 2003, Zambia introduced Intermittent Presumptive Treatment (IPT) for pregnant women, to mitigate the above stated effects of malaria in pregnancy. Currently, IPT consists of 3 doses of Sulphadoxine-Pyremethamine (SP) to be taken one month apart in the 2nd and 3rd trimesters of pregnancy. This is to be taken as a directly observed therapy (DOT) in antenatal clinics (ANC).

About 90% of pregnant mothers in Zambia have at least one antenatal visit during their pregnancy. This has led to 65% of women taking a dose of IPT during a single pregnancy. Given this scenario, about 25% of the pregnant women who attend ANC for the first time do not complete the three doses. The key challenge is that pregnant women do not attend ANC as per recommended practice. The recommendation in the malaria treatment policy is that each pregnant woman takes all three doses of IPT. The current target is to have at least 90% of women taking all the three doses of IPT.

Efforts to reduce the burden of Malaria during Pregnancy focus on: a) improving access to Intermittent Preventive Treatment (IPT) with SP at least three times during the second and third trimester; b) improving access to use of ITNs by pregnant women; c) reducing anaemia through the above, plus micronutrients and improved nutrition; and d) improving diagnosis and treatment for pregnant women with clinical malaria.

Intermittent Presumptive Treatment.

About 90% of pregnant women in Zambia have at least one antenatal visit during their pregnancy; booking occurs at about 5 ½ months. IPT should begin after the first trimester and the use of ITNs should be as early as possible. IPT was introduced through ANCs in 2003, to be taken as Directly Observed Therapy (DOT). Initial reports from sentinel districts indicate good uptake of IPT, at least for the first dose, but a drop-off for subsequent doses, with fewer women receiving the recommended three doses.

Caring for the Sick - Clinical Care and Community Based Care

An average of 35 - 45% of hospital visits and bed occupancy is due to malaria related infections. The percentage of self, household based treatment is equally significant for malaria. Other estimates for use of and consultations of traditional healers are also significant. The formal health system does not therefore represent the only contact and treatment for malaria n Zambia.

MoH changed its malaria treatment policy in 2003,with Artemether-Lumafantrine being introduced as the new first line drug due its known effectiveness. There is 100% availability of Coartem® in the formal public sector but none in the private- profit sector and at community level.

There is need to consolidate on these gains by improving drug (especially ACT) procurement and logistics management. National, district and health facility quantification of ACT needs to be reviewed in order to improve the accuracy of the quantification.

Training of relevant health and related workers needs be done on management of the drug and other supplies coupled with sanctions on those mishandling the drug. The community will be sensitised on correct use of the drug and to negative effects of purchasing the recommended drug from unauthorised handlers. The institutions monitoring drug use and medical practice such as the Pharmacy Regulatory Authority (PRA) and Medical Council of Zambia (MCZ) shall be supported to ensure that professional conduct in malaria treatment prevails in both public and private sectors.

Training and Community Based Care

Treatment of malaria at community level has deteriorated due to dwindling quality and quantity of community health workers and use of a drug that may not be very effective as first line treatment. The first step shall be to strengthen the malaria component of community IMCI.Community health workers shall be trained in cIMCI and retained, in order to increase their quantity and quality. This training shall culminate into rolling out of cIMCI throughout the country. This shall improve care of the sick at this level of service provision. Studies have shown that 81% cases of fever attempt treatment (especially antimalarial) in the community, therefore, a lot of gains can be achieved in investing at community level.

Private Sector Access to Effective ACT

The private sector is currently using Artemisinine monotherapies and other antimalarial drugs to treat malaria and not the recommended Artemisinine Combination Therapy (ACT). This means that they are not treating malaria according to the current treatment guidelines. There shall be countrywide orientation of private sector physicians on the new treatment policy and random checks to enforce the latest malaria treatment policy.

Strengthen Drug Quantification, Tracking and Documentation of Drug Consumption

In order to reduce risks of irrational usage of drugs, prescribing practices and other related likely areas of weakness drug management, there will be a strengthening of the capacities in health institutions, central medical stores as well as district and hospital management teams in areas relating to drug quantification, tracking and documentation as well as drug consumption

by patients. Part of this effort will also be directed towards the strengthening of the Drug Regulatory Authority.

Programme Management Operational Design

Zambia is planning for full national scale-up of its key malaria prevention and control strategies with a focus on: 1) reduction of malaria transmission through the use of insecticide-treated mosquito nets (ITNs), indoor residual spraying of house walls (IRS) and integrated vector management (IVM); 2) preventing the consequences of malaria in pregnancy through the use of ITNs, intermittent preventive treatment in pregnancy (IPTp), and case management for malaria illness; and 3) the prompt and effective case management (PECM) of malaria illness, particularly in young children. Tracking the progress in expanded coverage and measuring the impact of this intervention scale up and making effective use of this information for continued planning will require considerable capacity building at the level of the National Malaria Control Centre (NMCC) and National Malaria Control Programme (NMCP) and at District Health Management Team (DHMT) level across the country.

Relevant information for monitoring and evaluating progress in national malaria control comes from many sources and stakeholders encompassing governmental, non-governmental, private, and international agencies. Collecting, analyzing, interpreting, and reporting on the strategic information from stakeholders' forms a crucial part of national M&E activities. Strategic information is guided by available standards and norms for defining key malaria monitoring and evaluation indicators for measuring progress and program performance, as well as overall national or program goals and objectives. Several efforts to define and standardize relevant indicators exist. Understanding the role of stakeholder agencies in defining, collecting, disseminating and reporting strategic information is important for coordinating national malaria M&E needs.

Communication and Community Social Change

Some of the core impediments to effective programme implementation, even when given efficacious interventions may be the lack of community involvement and awareness. This could happen at different levels such as the community level (intended beneficiaries) leadership level or technical level with the structures at the national, provincial, district and the community. Timely, embaracing and effective communication to facilitate stakeholder awareness, co-operation, acceptance and ownership of the entire process and programmes is central to the malaria programme especially in relation to the core strategic interventions. Consequently, the design of the communication approach for social change is to enhance and contribute to the reduction of malaria-related morbidity and mortality through increased knowledge and skills.

The communication strategy will focus on the creation of an environment that will facilitate a conducive and collaborative community effort for the implementation of NMSP.

Structures in the Organisation of the Strategy Implementation

As with all other programmes, consideration has been made of the different roles and responsibilities that shall be performed at the National, Provincial, District and Community levels.

The districts and provincial offices shall be responsible for the implementation of the Communication Strategy. The target of the strategy shall be the health care providers, households, local traditional leadership structures and political as administrative leadership.

Included in this operational approach will be the issues relating to:

- Increasing the knowledge and skills among 80% of health services providers on effective communication for malaria prevention and control by 2010.

- To increase utilization of multi media to disseminate information to communities for the adoption of positive health behaviours.

- To encourage the use of ITNs by community members and re treatments so that 60% of pregnant women and children under five sleep under an ITN by the year 2010

- Conduct mass re- treatment campaigns through Communication (commemorative days and integrated health activities e.g. Measles campaign)

- To encourage the uptake of taking Intermittent Presumptive Treatment (IPT) by pregnant women from 40% to 80% by 2010.

- Promote taking of IPT by pregnant women
- Train service providers in BCC techniques

- To strengthen and sustain multi-sectoral provincial and district IEC committees to implement community-based malaria communication interventions.
- To advocate for increased participation of all partners in malaria control by 2005

    1. Develop tool for collect of information on all malaria partners
    2. Update Database on partners
    3. Strengthen Partnerships
    4. Mobilise Resources for malaria activities

- To undertake monitoring and evaluation on the impact of BCC interventions

Human Resource, Programme Management and Systems Strengthening

Human resource is a priority due to the significant levels of depletion in human resource quantities and quality that has pervaded the health sector progressively over the previous decade. The extent to which a success programme is expanded becomes contingent on the appropriate availability of human resource. In this context the role of HR has been factored into the programme in order to assume a central role integrated into the system needs as opposed to significantly vertical orientation, so as to enable systematic programme continuation.

The key roles that are played at each respective level of the system has specific human resource demands i.e. national, provincial and district (including the community level). The capacity of ensuring that there are the following:

- Organisationall Capacity for Planning, Management, Control and Accountability
- Staff Worker Availability – Increased Staff – Population Density
- Skills Development and Retention
- Results Based Performance Management and Contracting Mechanisms

Is central to the strategy of minimising HR effects and ensuring that there is an improving critical mass of HR with the capacity to absorb and harness the emerging challenges.

Fiduciary and Commissioning Arrangements

The Zambian health system has focussed on developing and encouraging its co-operating partners to be active players. The financing of the malaria programme may progressively be through the SWAp arrangement as well as directly as a programme based effort. This will be coupled with the programme utilising commissioning of providers (contractees) to facilitate improved service provision.

Operational Planning

ITNs

The deployment of insecticide treated nets (ITNs) is the cornerstone of the rapid scale up of malaria program coverage during the initial three years of the 2006-2011 NMSP. In 2005-2006 a campaign will distribute 3 free-to-the-user ITNs per household in high risk districts. In addition the highly-subsidized ITNs will be distributed in to ANC and C-IMCI sites in all districts; and the commercial sale will continue where the private sector sells ITNs.

An aggressive campaign of annual retreatment of all ITNs in Zambia will be conducted in conjunction with Child Health Weeks, and in particular just prior to the start of malaria transmission season.

IVM	**ITNs**	Mass distribution of ITNs	x number of ITNS or retreatment kits distributed to districts	**x**			**x**				**x**				**x**	
			Supply chain and logistics needs assessment is complete	**x**		**x**				**x**				**x**		
			Districts oriented to mass campaign modality	**x**				**x**				**x**				**X**
			Joint Work Plan is Developed with District Partners	**x**			**x**				**x**				**x**	
			Registries are updated	**x**			**x**				**x**				**x**	
			Funds released to districts	**x**				**x**				**x**				**X**
			Communities/health neighborhoods are prepared for ITN distribution and retreatment campaigns	**x**				**x**				**x**				**X**
			ITNs and retreatment kits are delivered to Districts	**x**			**x**				**x**				**x**	
			ITN distribution and retreatment campaign has been completed	**x**				**x**				**x**				**X**
			An evaluation report is completed.	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**X**

Budget analysis

The number and value of required nets that is covered with current available resources is relatively substantial, when the previous performance is taken into consideration. However, there is a resource and commodity gap which makes it necessary for partners and all other stakeholders to take cognizance of. The financing gap on the ITNS arises not substantially as a consequence of the commodity requirements so much as the related resource for human resource in the form of Community Health Workers and other volunteers required to ensure that the distribution of ITNS to households is successfully undertaken. The ITN intervention is extensively labour intensive and this attributes to the relatively higher human resource costs when measured against the rest of the interventions. The gap in ITNs is estimated to be at least one per household, given the target of attaining a minimum of 3 ITNs available per household. Given an average price of $2.8 per ITN this translates into about $6 million required by 2008.

IRS

Zambia has a historical commitment to the application of Indoor Household Residual Spraying (IRS) particularly in economically important areas and in urban areas with high density of eligible dwellings. The strategy for 2008-2008 is to focus the use of IRS to high priority areas of 15 districts that have at least 50% of dwelling that are eligible for IRS. The IRS interventions will be deployed with a high level of attention to environment and human impact and to safe storage, handling, and disposal of insecticides.

IVM	**IRS**	Mass Annual Campaign	61 Trainers	**x**												
			550 community members active as Spray operators	**x**				**x**				**X**				**x**
			Commodities procured for the targeted 14 districts	**x**		**x**				**x**				**x**		
			Eligible communities prepared for spray campaign	**x**				**x**				**X**				**x**
			IRHS commodities distributed in the 14 districts	**x**				**x**				**X**				**x**
			IRHS guidelines with implementing districts	**x**				**x**				**X**				**x**
			Targeted 14 districts conduct IRHS	**x**				**x**				**X**				**x**
			Monitoring and supervision activated	**x**				**x**				**X**				**x**
			Eligible districts IRHS needs identified		**x**				**x**				**x**			
			National IRHS commodities requirement known		**x**				**x**				**x**			
			Commodities procured			**x**				**x**				**x**		
			Commodities distributed to the eligible districts	**x**				**x**				**X**				**x**
			297 Trainers of Trainers active				**x**				**x**				**x**	
			2520 community members active as Spray operators				**x**				**x**				**x**	
			IRHS guidelines with implementing districts				**x**				**x**				**x**	
			Eligible communities prepared for spray campaign	**x**				**x**				**X**				**x**
			Eligible districts conduct IRHS				**x**				**x**				**x**	

Budget analysis

IRS is to be undertaken in 15 districts. The further expansion of IRS will to a large extent depend on the capacity for additional resource mobilization. Lessons and experiences from Mazabuka and the Copperbelt demonstrate the substantial reduction in prevalence attributable to the application of IRS. Given the current resource envelope, it is not anticipated that there will be any gaps experienced in the coverage of the 15 districts.

Malaria in Pregnancy

The Malaria during Pregnancy programme objective are framed to build on the high levels of Antenatal Clinic attendance in Zambia by fully integrating MIP services into existing Focused ANC sites and to assure high levels of utilization of the full MIP package by pregnant women accessing care in non-FANC sites.

MIP	Strenghthen MIP Component of FANC & Private Sector Care	Curricular & checklist reviewed & updated		**x**											
		Performance Assessment Extended to Private Sector	**x**	**x**											
		Private Sector Staff Trained		**x**											
		Laboratory Staff Trained		**x**				**x**				**X**			
		MCH Staff Trained		**x**				**x**				**x**			
		Hb & malaria diagnostic equipment procured		**x**				**x**				**x**			
		X number of public health care facilities are providing the complete MIP package					**x**				**x**				**x**
		X number of private health care facilities are providing the complete MIP package					**x**				**x**				**x**
	Strengthen BCC Component of Safe motherhood & AH communication & strengthening	IEC/BCC Campaigns to promote MIP are completed	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
		Management of the School Health Malaria Package is delegated to DHMTs	**x**												
		MIP component strengthened in SMH & AH curricula			**x**										
	Strengthen M&E for MIP	MIP M&E strengthened	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
		X number of institutions conducting maternal death reviews			**x**				**x**				**x**		
		X number of facilities with effective data collection and management systemsmanagers trained	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
		FANC roll out is externally evaluated											**x**		

Budget Analysis

The current assessment does not demonstrate significant shortfalls or gaps in the provision of MIP care.

Case Management

Zambia has a well-designed malaria drug therapy policy in which Coartem is the primary drug to be used for all malaria infections (except young infants and pregnant women. The strategy plan commits to expanding access to Coartem in community sites and in the private sector. Coartem supplies hare available in all districts, yet future procurement and drug supply chain management require enhanced support and capacity.

Case Management	Consolidate management of the drug policy	X number of staff are trained in inventory mgmt			**x**				**x**				**x**		
		X number of facilities perfoming within defined standards of logistics management (DILSAT)		**x**	**x**										
		Develop and implement a leakage prevention plan	**x**												
		x number of facilities monitoring adherence		**x**	**x**	**X**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
	Strengthening malaria component & rollout of cIMCI	Community sensitised	**x**			**X**				**x**				**x**	
		cIMCI rollout strengthened	**x**												
	Roll-out current treatment guidelines	X Number of Private sector practising according to current guidelines	**x**												
	Expanding microscopy or RDTs to all health facilities	% of Facilities that are able to confirm malaria diagnosis	**x**			**X**			**x**			**x**			

Budget Analysis

Case management involves for ease of analysis three elements – management of uncomplicated malaria, management of complicated malaria and referrals as well as diagnosis. The treatment policy change has led to the introduction of an effective but expensive anti malarial first line drug. In order to manage both the cost of increased care provision as well as the improvement capability of health workers in managing malaria, the treatment aspect has to be supplemented with capacity for appropriate and improved diagnostic capacity in the form of microscopy and rapid diagnostic testing kits. The use of the technology involved under case management leads to the existence of a resource gap that in the immediate time frame appears comparatively high. However, it is the expectation that appropriate application of increased and improved diagnosis as well as treatment used as a package with preventive interventions, will lead to increasingly drastic reductions in malaria prevalence. The investment benefits of the increased resource requirements are inevitable to reduce ill health and death. The projected deficit that has arisen out of the case management technology use is anticipated to be about 50% of overall resource requirements in 2006 and 2007. It is anticipated that given the resources available, the gaps for 2008 to 2010 will decline substantially.

Programme Management

The NMSP will be implemented by a network of program partners and the districts. The NMCC will serve an increasingly important role in policy development, programme monitoring and evaluation, and partner coordination, and its capacity and authority will be enhanced to assure programme implementation success. District capacity to plan and implement malaria programming will be strengthened through collaborative inputs with other programming partners. Programme financing a will be a critical determinant of success in attaining the objectives of the NMSP, and the capacity for financial planning and tracking at all levels of the health system will be re-enforced.

The RBM Partnership will assess the human resource constraints to the implementation of the NMSP and actively work to mobilize adequate resources to assure that HR constraints do not limit implementation success.

Malaria scale up depends on a predictable adequacy supply of quality malaria commodities, namely ITNs and malaria drugs. National forecasting, procurement, and supply chain management systems will be strengthen.

Organizational alignment	NMCC effectively manages policy		**x**		**x**		**X**		**x**		**x**		**x**	
Programme Planning and Design	Strategic, implementation, business and annual work plans are evidence based					**x**				**x**				**x**
	District MTEFs address rapid scale up of malaria control					**x**				**x**				**x**
	All levels of the health system have access to programme performance data and rationale for best practices						**X**				**x**			
Human Resource Management	An HR planning and forecasting framework exists for projecting human capacity needs and costs across all cadres and levels of the health system for malaria				**x**									
	All levels of the health system have staffing and training plans inclusive of malaria control needs			**x**				**x**				**x**		
Financial Management	An assessment of required financial flows for rapid scale up is completed	**x**												
	A financial planning and forecasting framework exists for malaria prevention and control			**x**	**x**									
	All levels of the health system have financial planning and management plans inclusive of malaria prevention and control related requirements					**x**	**X**							
Procurement and Supply Chain Management	Malaria section of the national procurement plan is completed		**x**				**X**				**x**			
	Contracting mechanisms are in place to support procurement.		**x**				**X**				**x**			
	Supply chain management systems are in place at all levels of the health system for malaria commodities					**x**								
	Contracting mechanisms are in place to support supply chain management.	**x**												

	Required commodities are on site in advance of malaria season	**x**				**x**				**x**				**x**
Coordination of Partnerships	Partnership agreements are in place that detail resource support to NMSP and implementation plans	**x**												
	Contractual agreements are in place in support of programme implementation	**x**												
	RBM Partners meet amongst themselves to harmonize.	**x**												
	RBM Partners have a representative on advisory and national policy boards.	**x**												
	A communication plan for updating donors and partners is in place	**x**												
	NMCC effectively manages consensus mechanisms of RBM Partners	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
	Districts effectively manage consensus mechanisms for operations with local partners	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
Resource Mobilization	Resources are mobilised to fully fund rapid scale up plan				**x**									

Budget Analysis

In the Programme Management section the HR component takes into account share resources. The HR is in other words, fully integrated into the health system, including the share of HR that is specifically responsible for the malaria programme. Consequently, this function has the highest level of deficit. Investment gaps exist in the other areas.

Empowering Individuals and Communities

The NMSP emphasizes community-based programme interventions a programme of targeted of Behavior Change Communications will be implemented to engage communities in the appropriate use of the intervention packages. A multi-pronged programme of Mobilizing Community Response will be implemented building on established malaria programming efforts as well as new partnership with other community-based programmes, such as HIV/AIDS.

IEC/BCC	Partners are engaged in planning, implementing and evaluating annual IEC/BCC campaigns	**x**												
	Annual IEC/BCC campaigns are conducted	**x**				**x**				**x**				**x**
	X number of districts using Intervention specific communication strategy in line with national cs					**x**				**x**				**x**
	Key stakeholders receive quarterly updates on achievements of national malaria control plan	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
Mobilising Community Response	X of NHCs coordinating and implementing malaria plans	**x**	**x**	**x**	**x**									

Budget Analysis

Advocacy, communication and social change intervention constitute key factors in the facilitation of the core interventions. The frequency of these interventions as well as the necessity of interventions related to aspects such as storage which is lacking both in terms of human resource requirements and actual physical infrastructure, are sources of gaps.

Commitment to Performance Monitoring and Impact Evaluation

The NMSP focuses on a comprehensive assessment of programme impact as well as to ensure routine monitoring, both in terms of health and economic indicators. Further systems will be developed and implemented to assure programme monitoring capacity to assure timely programme reorientation to address programming barriers. The malaria programme M&E will be strengthened to build on existing health sector systems, e.g. HMIS) and to strengthen health and specific malaria survey tools.

M & E	Unified performance monitoring system is integrated			**x**										
	An impact evaluation system is developed and implemented			**x**										
	Reports are disseminated to all levels of health system, partners, government and community		**x**											
Research	Research findings inform policy formulation and decision making	**x**			**x**				**x**				**x**	

Budget Analysis

The monitoring and evaluation component is fully budgeted over the duration of the SP.

Appendices

Detailed Work Plan for the National Malaria Strategic Plan: 2006 - 2011

Three Year Draft Implementation Plan						Time Frame 2006 - 2011 (Including qtr 4, 05)													
Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding**	**Indicators**
Reduction of disease burden	**IVM**		ITNs	Mass distribution of ITNs	x number of ITNS or retreatment kits distributed to districts	Finalisation of quantification of malaria ITM commodities	X			X				X				X		**NMCC/DHMTS**	**NET REQUIREMENT PER DISTRICT**
						Procurement plan prepared		X				X				X				**MOH**	**PROCUREMENT PLAN**
						Procurement - tendering process initiated		X				X				X				**MOH**	
				Mass Cover Up Campaign	Implementation and coordination guidelines developed	Implementation and coordination guidelines developed and disseminated to DHMTS														**NMCC**	**# OF DHMTS AND HMTS IMPLEMENTING GUIDELINES**
					Micro planning meetings completed	MoH/NMCC to hold micro planning meetings with PHOs/DHMTS	X		X				X				X			**NMCC/PHOS/DHMTS**	**# MICRO PLANNING MEETS HELD**
					Micro plans developed	DDH to Complete Needs Assessment - Storage, Transport of People and Nets, HR, etc--DDH to Complete Budget Based Needs Assessment and Planned Activities	X		X				X				X			**NMCC/PHOS/DHMTS**	**DHMTS WITH MICRO PLANS**
					Districts oriented to mass campaign modality	Orientation of DHMT	X				X				X				X	**NMCC**	
					Joint Work Plan is Developed with District Partners	Consultation and Coordination with District Partners on their roles in mass cover up campaign	X			X				X				X		**DHMTS**	**# DHMTS WITH JWP**
						Orientation of Health Centers	X			X				X				X		**DHMTS**	
						Orientation of NHC by Health Centre	X				X				X				X	**DHMTS**	
					Registries are updated	NHCs Compile Community Registries for use in mass cover up campaign	X			X				X				X		**DHMTS**	**# OF DHMTS WITH UPDATED REGISTRIES**
							X			X				X				X			

Three Year Draft Implementation Plan					Time Frame 2006 - 2011 (Including qtr 4, 05)														
Expected Outcome	Intervention package			Operational strategy	Milestones	Activities	05q4	06q1	06q2	06q3	06q4	07q1	07q2	07q3	07q4	08q1	08q2	08q3	08q4	Level of Responsibility and funding	Indicators
					Funds released to districts and PHOS	Disbursement of funds to DHMTS and PHOs	X				X				X				X	NMCC	# OF DHMTS RECEIVING FUNDS
						DHMT to Meet to Discuss Implementation of Plans	X				X				X				X	DHMT	
						DHMT to Create Core Team (DHIO, NMCC, DDH, MPD, MCH, stakeholder rep., HC rep.)	X		X				X				X			DHMT	
						Weekly Monitoring Meetings with Core Team	X		X				X				X			DHMT	
						DHMT to Allocate Funds According to Budgets	X		X				X				X			DHMT	
					Communities/health neighborhoods are prepared for ITN distribution campaigns	Communications campaign in collaboration with ZIS (radio, TV, IEC)	X				X				X				X	DHMT	
						Organize Storage and Distribution at the District & HCs	X			X				X				X		DHMT	
					ITNs and retreatment kits are delivered to Districts	NMCC to Organize Net Delivery to District	X			X				X				X		NMCC	PROPORTION OF DHMTS RECEIVING RETREAMENT CHEMICALS TIMELY
						District to Organize Net Delivery to HC in Readiness for Campaign Dates	X				X				X				X	DHMT	
					ITN and retreatment campaign has been completed	HCs, NHCs & Local Leadership to coordinate distribution of nets to HHs	X				X				X				X	DHMT	# OF ITNS RETREATED
						Core Team to Carry Out Assessment of Campaign	X	X	X	X	X	X	X	X	X	X	X	X	X		
						Core Team to Write Report, Presented to Stakeholders & NMCC		X			X					X			X		
					An evaluation report is completed.	DHMT to Carry Out Ongoing Monitoring of Project Indicators & Report to NMCC Quarterly	X	X	X	X	X	X	X	X	X	X	X	X	X		

Three Year Draft Implementation Plan						Time Frame 2006 - 2011 (Including qtr 4, 05)														
Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding**	**Indicators**
				Re-treatment Campaign																	
	MIP			Strengthen MIP Component of FANC & Private Sector Care	Curricular & checklist reviewed & updated	Get local consultant to review curriculum & training guidelines, manuals and protocols		X												**MOH**	**REVISED CURRICULAR IN PLACE**
						Review training programmes to incorporate MIP		X													
						Update ANC checklist		X													
					Performance Assessment Extended to Private Sector	Consultative process with relevant bodies.i.e. PSA, PPA, MCZ, ZMA, GNC, development of assessment tools, assessing private health care providers	X	X	X		X		X		X		X		X	**PHO**	**PROPORTION OF PRIVATE HEALTH FACILITIES PROVIDING IPT**
						Assessment tool for private sector developed, piloted and agreed	X	X													
					Private Sector Staff Trained	Training providers for Hb checking		X												**MOH**	
					Staff trained in lab activities	Training in supply chain management / DILSAT		X				X				X				**MOH**	**# OF STAFF TRAINED IN LAB ACTIVITIES**
					MCH Staff Trained	Development of training materials, TOTs, Orienting MCH coordinators		X				X				X				**MOH**	**# OF STAFF TRAINED IN MCH**
					Hb & malaria diagnostic equipment procured	Equipment & supplies for checking Hb meters about 2,000/site, procuring process activated			X			X				X				**MOH**	**# OF FACILITIES OF FACILITIES SUPPLIED WITH EQUIPMENT**
						Id		X				X				X				**MOH**	
					X number of public health care facilities are providing the complete MIP package	FANC rolled out to all districts		X			X				X				X	**MOH**	

Three Year Draft Implementation Plan					Time Frame 2006 - 2011 (Including qtr 4, 05)															
Expected Outcome	Intervention package			Operational strategy	Milestones	Activities	05q4	06q1	06q2	06q3	06q4	07q1	07q2	07q3	07q4	08q1	08q2	08q3	08q4	Level of Responsibility and funding	Indicators
					X number of private health care facilities are providing IPT package	Identification of private health facilities for IPT implementation, IPT rolled out to selected private health priviDers	X	X			X				X				X	MOH	
				Strengthen BCC Component of Safe motherhood & AH communication & strengthening	IEC/BCC Campaigns to promote MIP are completed	Sensitisation of community members & leaders on IPT and related topics	X	X	X	X	X	X	X	X	X	X	X	X	X	DHMTS	# OF IEC/BCC CAMPAIGNS CONDUCTED PER YEAR
						Identification and selection of schools, orientation of teachers in identified schools, Outreach with schools and school health and nutrition programmes	X	X	X	X	X	X	X	X	X	X	X	X	X	DHMTS	
						Participation in reproductive health weeks, to start with a few provinces, to precede transmission season			X				X				X			DHMTS	
					Management of the School Health Malaria Package is delegated to DHMTs	Provision of ITNs and IEC on IMP					X				X				X	DHMTS	# DHMTS MANAGING SCHOOL HEALTH MALARIA PACKAGE
					MIP component strengthened in SMH & AH curricula	Consultant to link with HIV life skills programmes			X											MOH	# OF TRAINING FACILITIES WITH NEW CURRICULAR
				Strengthen M&E for MIP	MIP M&E strengthened	Maternal Death Reviews expanded	X	X	X	X	X	X	X	X	X	X	X	X	X	DHMTS/HMTS	PROPORTION OF DISTRICTS PROVIDING COMPLETE DATAREQUIREMENTS ON MIP
					X number of institutions conducting maternal death	Orientation of DHMTS/HMTS, implementation and participation in MDRs, evaluation of DHMTS/HMTS in implementation of MDRs			X				X				X			MOH	PROPORTION OF DHMTS/HMTS PARTICIPATING IN MDRS

Three Year Draft Implementation Plan					Time Frame 2006 - 2011 (Including qtr 4, 05)																
Expected Outcome	Intervention package			Operational strategy	Milestones	Activities	05q4	06q1	06q2	06q3	06q4	07q1	07q2	07q3	07q4	08q1	08q2	08q3	08q4	Level of Responsibility and funding	Indicators
					reviews																
					X number of facilities with effective data collection and management systems managers trained	Selection of data managers and other key staff in data management, development of curriculum, Training on data management for data managers	X	X	X	X	X	X	X	X	X	X	X	X	X	MOH/DHMTSHMTS	PROPORTION OF DHMTS/HMTS REPORTING ACCORDING TO REQUIREMENT
					FANC roll out is externally evaluated	TORS, recruitment of external evaluators, Assessment of FANC performance, dissemination of report											X			MOH	EVALUATION REPORT
	CH		ITNs	Routine ITN Distribution - IMCI/c-IMCI																	
			IPT																		
					Guidelines in IRS in use	Develop, distribution IRHS guidelines to districts	X			X				X				X		NMCC	
		IRS	IRS	Mass Annual Campaign	64 Trainers Trained	Training of 64 Trainers for IRHS in 15 targeted districts	X			X				X				X		NMCC/PHO/PARTNERS	# TRAINED
					At least 575 community members active as Spray operators	District Cascade IRHS trainings of at least 575 Spray operators (community workers) and distribute IRHS Guidelines	X			X				X				X		DISTRICT	# TRAINED
					Eligible districts IRHS needs identified	Conduct Needs Assessment	X	X				X				X				NMCC/PHO	NEEDS ASSESMENT REPORTS, AREAS SPRAYED
					National IRHS commodities requirement known	Quantification of IRHS commodities and eligible structures identified		X				X				X				PHO/DISTRICS	QUANTIFICATION REPORTS
					Commodities procured for the targeted 15 districts	Procurement of IRHS commodities (Spray pumps,PPE, Trucks, water bowsers, insecticides & repair kits)	X	X	X	X		X				X				NMCC	# DISTRICTS REPORTING STOCK-OUTS

Three Year Draft Implementation Plan					Time Frame 2006 - 2011 (Including qtr 4, 05)															
Expected Outcome	Intervention package			Operational strategy	Milestones	Activities	05q4	06q1	06q2	06q3	06q4	07q1	07q2	07q3	07q4	08q1	08q2	08q3	08q4	Level of Responsibility and funding	Indicators
					Storage facilities refurbished, expanded and constructed in 15 districts	Refurbish, expand and construct storage facilities	X	X	X	X		X	X	X		X	X	X		DISTRICTS	PROPORTION OF DISTRICTS OUTSOURCING STORAGE FACILITY
					All 15 districts meeting environmental safeguard requirements	Environmental safeguards developed, disseminated and implementation undertaken	X	X	X	X	X	X	X	X	X	X	X	X	X	NMCC	
					Eligible communities prepared for spray campaign	Social Mobilisation of eligible communities and Districts distribute IEC materials to communities.	X			X				X				X		DISTRICTS	# HOUSEHOLDS SPRAYED
					IRHS commodities distributed in the 15 districts	IRHS commodities distributed(Spray pumps, insecticides & repair kits)	X			X	X			X	X			X	X	NMCC	
					IRHS conducted	Conduct IRHS in the 15 targeted districts	X				X				X				X	DISTRICTS	
					Monitoring, evaluation and supervision activated	Conducting Monitoring, Evaluation and Supervision - bioassays, susceptibility tests, vector densisity and species' data collection - HMIS and parasitological data,	X	X	X	X	X	X	X	X	X	X	X	X	X	NMCC/PARTNERS	
					Research towards DDT alternatives initiated	Research - conduct trials on potential DDT alternative list of WHO recommended insecticides	X	X	X	X	X	X	X	X	X	X	X	X	X	NMCC/PARTNERS	
					IRHS guidelines with implementing districts	Distribution of IRHS guidelines and IEC materials				X				X				X		NMCC/PHO	
		Environmental Management																			
		Communi		Consolidate management	cIMCI rolled out	Cascade training on cIMCI, development of			X	X											

Three Year Draft Implementation Plan						Time Frame 2006 - 2011 (Including qtr 4, 05)														
Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding**	**Indicators**
		ty		of drug policy		training guidelines															
						Procurement of bicycles ,bags and uniforms for CHWs		X												MOH	PROPORTION WITH CIMCI
						CHWs start working according to cIMCI guidelines					X										
	Case Management			Consolidate management of the drug policy	X number of staff are trained	Development of training guidelines, Train staff in IMCI and management of severe malaria		X	X											MOH	NUMBER OF STAFF PRACTICING ACCORDING TO CURRENT TREATMENT GUIDELINES AND IMCI
Quality care for the sick within twenty-four hours																					
					X number of facilities perfoming within defined standards of logistics management (DILSAT)	Review of target workers,identify workers to be trained, train staff in drug logistics management		X	X												
					Develop and implement a leakage prevention plan	survey/audit to identify possible high risk areas of leakage, consensus and clarification of measures by stakeholders in logisitcs management system, implementation of anti-leakage measures, evaluation of implementation measures	X	X	X			X				X					
						Public awareness, collaboration with the private sector, strengthen stores control procedures and strores staff		X	X												
					x number of facilities surveyed for adherence	Improve client compliance/adherance, BCC campaigns for improved compliance		X	X	X	X	X	X	X	X	X	X	X	X	MOH	PROPORTIONN OF PATIENTS ADHERING TO PRESCRIBED MEDICATION
				Strengthening malaria component & rollout of cIMCI	Community sensitised	IEC/BCC campaigns to sensitize community members & mobilisation of community to support CHW	X			X				X				X		DHMT	PROPORTION OF COMMUNITY MEMBEFS AWARE OF ROLE OF CHW

Three Year Draft Implementation Plan							Time Frame 2006 - 2011 (Including qtr 4, 05)														
Expected Outcome	Intervention package			Operational strategy	Milestones	Activities	05q4	06q1	06q2	06q3	06q4	07q1	07q2	07q3	07q4	08q1	08q2	08q3	08q4	Level of Responsibility and funding	Indicators
					cIMCI rollout strengthened	Review current supervisory tool, update supervisory tools	X													PHO	NUMBER OF DISTRICTS IMPLEMENTING CIMCI ACCORDING TO GUIDELINES
						Purchase of commodities, supplies and equipment for CHWs	X	X	X	X	X	X	X	X	X	X	X	X	X		
						Policy to formally allow CHWs to prescribe ACT			X	X											
						DHMTs to assess capacity to deliver ACT through cIMCI			X												
						ACT delivered through cIMCI as determined by DHMT					X										
						Evaluation of cIMCI pilot in two districts, Evaluation of cIMCI		X				X				X					
		Private sector		Rolling-out current treatment guidelines	X Number of Private sector practising according to current guidelines	Training on current malaria treatment guidelines and evaluation	X			X				X							
				Expanding microscopy or RDTs to all health facilities	% of Facilities that are able to confirm malaria diagnosis	Identification of health facilities for RDTS or microscopy eligibility	X			X			X			X				MOH	PERCENTAGE OF FACILITIES WITH MALARIA DIAGNOSTIC EQUIPMENT
						Training of microscopists	X	X	X	X	X	X	X	X	X	X	X	X	X		
						Procurement & distribution of microscopes		X				X									
						Training on use of RDTs	X	X													
						Procurement & distribution of RDTs	X	X				X				X					
						Evaluation of laboratory performance		X		X		X		X		X		X			

Three Year Draft Implementation Plan							Time Frame 2006 - 2011 (Including qtr 4, 05)													
Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding** / **Indicators**
Programmes are effectively managed	**Organizational alignment**				NMCC effectively manages policy	Advisory and partner working groups review meetings		**X**		**X**		**X**		**X**		**X**		**X**		**NMCC**
	Programme Planning and Design				Strategic, implementation, business and annual work plans are evidence based						**X**				**X**				**X**	**NMCC**
					District MTEFs address rapid scale up of malaria control						**X**				**X**				**X**	
					All levels of the health system have access to programme performance data and rationale for best practices							**X**				**X**				
	Human Resource Management				An HR planning and forecasting framework exists for projecting human capacity needs and costs across all cadres and levels of the health system for malaria					**X**										**NMCC** / **STAFF IN PLACE**
					All levels of the health system have staffing and training plans inclusive of malaria control	Districts have planning support to manage temporary staffing pools for rapid scale up efforts			**X**				**X**				**X**			

Three Year Draft Implementation Plan					Time Frame 2006 - 2011 (Including qtr 4, 05)														
Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding**	**Indicators**
					needs																
						NMCC has the capacity to manage human resources				X											
	Financial Management				An assessment of required financial flows for rapid scale up is completed		X													NMCC	FAMS REPORTING
					A financial planning and forecasting framework exists for malaria prevention and control	NMCC has the capacity to manage financial resources			X	X											
					All levels of the health system have financial planning and management plans inclusive of malaria prevention and control related requirements						X	X									
	Procurement and Supply Chain Management				Malaria section of the national procurement plan is completed			X				X				X				NMCC	
					Contracting mechanisms are in place to support procurement.	Prequalification, specification, quantification and incorporation of malaria procurement plan into national plan		X				X				X					

Three Year Draft Implementation Plan						Time Frame 2006 - 2011 (Including qtr 4, 05)														
Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding**	**Indicators**
					Supply chain management systems are in place at all levels of the health system for malaria commodities						X										
					Contracting mechanisms are in place to support supply chain management.		X														
					Required commodities are on site in advance of malaria season		X				X				X				X		
	Coordination of Partnerships				Partnership agreements are in place that detail resource support to NMSP and implementation plans		X													NMCC	# PARTNERS ATTENDING JOINT MEETINGS (SP)
					Contractual agreements are in place in support of programme implementation		X														
					RBM Partners meet amongst themselves to harmonize.	Recruit Country Partnership Advisor	X														
					RBM Partners have a representative on advisory and national policy boards.		X														
					A communication plan for updating donors and partners is in		X														

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Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding**	**Indicators**
					place																
					NMCC effectively manages consensus mechanisms of RBM Partners	TORs for advisory and technical bodies are in place	X	X	X	X	X	X	X	X	X	X	X	X	X		
					Districts effectively manage consensus mechanisms for operations with local partners		X	X	X	X	X	X	X	X	X	X	X	X	X		
	Resource Mobilization				Resources are mobilised to fully fund rapid scale up plan					X										NMCC	LEVEL OF RESOURCE AVAILABLE, # PARTNERS
Individuals and Communities are empowered to fight malaria	**IEC/BCC**				Partners are engaged in planning, implementing and evaluating annual IEC/BCC campaigns		X														
					Annual IEC/BCC campaigns are conducted		X				X				X				X		
					X number of districts using Intervention specific communication strategy in line with national cs						X				X				X		
					Key stakeholders receive quarterly updates on achievements of national malaria		X	X	X	X	X	X	X	X	X	X	X	X	X		

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Expected Outcome	**Intervention package**			**Operational strategy**	**Milestones**	**Activities**	**05q4**	**06q1**	**06q2**	**06q3**	**06q4**	**07q1**	**07q2**	**07q3**	**07q4**	**08q1**	**08q2**	**08q3**	**08q4**	**Level of Responsibility and funding**	**Indicators**
					control plan																
	Mobilising Community Response				X of NHCs coordinating and implementing malaria plans		X	X	X	X										NMCC	PROPORTION OF COMMUNITIES MOBILISED
	M & E				Unified performance monitoring system is integrated				X												
					An impact evaluation system is developed and implemented				X												
					Reports are disseminated to all levels of health system, partners, government and community			X														
Programme impact is evaluated and improved	Research				Research findings inform policy formulation and decision making		X			X				X				X		NMCC	# RESEARCH PAPERS COMPLETED

References