TANZANIA ROLL BACK MALARIA CONSULTATIVE MISSION (REAPING): ESSENTIAL ACTIONS TO SUPPORT THE ATTAINMENT OF THE ABUJA TARGETS

12 - 17 October 2003

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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 achieving the Abuja Targets.

Tanzania's broad based RBM partnership has achieved excellent progress on malaria prevention and control. Coverage levels for key interventions are increasing. If the NMCP and its partners are able to access Global Funds effectively and efficiently and cooperation and coordination is maximised at central and at district level, it is envisaged that Tanzania will not fall far short of obtaining the Abuja targets for ITNs and IPT by the end of 2005.

The following Essential Actions were identified during the Country Consultative Mission

1. Developing an integrated comprehensive communications strategy on malaria is a priority to ensure the effective implementation of prevention and control interventions. Development of the communication strategy and an implementation plan was costed at USD 54,000
2. Change in drug policy. To maintain improvements in access to effective treatment in the face of declining efficacy of the current 1st line anti-malarial drug SP, there is a need to begin planning for the next drug policy change and implementation of Artemisinin Combination Therapy (ACT). Preparations for the next anti-malarial drug policy change have been costed at USD 2,135,000, excluding procurement costs for ACT drugs
3. Anti-malarial drug quality. In order to effectively carry out quality assurance procedures on antimalarial drugs, the TFDA central laboratory and its Zonal laboratories need to be strengthened with extra equipment and the appointment of TFDA Zonal Antimalarial Programme Co-ordinators in each of the eight zones. Costs of this component have been estimated at USD 68,715 for equipment and USD 194,480 for zonal co-ordinators
4. Profile, Position and skills mix of NMCP. In order to allow the NMCP to engage fully with important strategic partners, it is crucial that its profile be raised, both internally within the MoH and externally with partners.
5. Training and Capacity Development. Training of recently identified district Malaria Focal Persons in each of the 121 districts is a priority and has been costed at USD 218,000
6. Monitoring and Evaluation. The NMCP's capacity for monitoring and evaluation and for co-ordination of research needs to be strengthened through creation of a malaria database, recruitment of a data manager, training in epidemiology, strengthening of sentinel districts, development and dissemination of guidelines, and strengthening of the Monitoring and Evaluation network. Total costs, including the mid-term evaluation of the Strategic Plan are estimated at USD122,000
7. Operational Research. Key areas include information on people's perception to malaria and health seeking behaviour (USD 7,000), effectiveness of CT (USD 500,000), evaluation of the role of diagnostics in Combination Therapy guidelines (USD 20,000)
8. Prevention and Containment of Epidemics The system for early detection and containment of malaria epidemics currently in use needs to be validated. In addition, guidelines for IRS need to be developed and teams at district and community levels in epidemic-prone areas need to be trained on indoor residual spraying (IRS) as a preventive strategy. Total costs are estimated at USD 50,000

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
AFRO	Regional Office for Africa (WHO)
AMREF	African Medical Research Foundation
ANC	Antenatal Care
CBO	Community Based Organisation
CCM	Country Coordinating Mechanism
CDC	Centers for Disease Control & Prevention
CEDHA	Centre for Educational Development in Health Arusha
CEEMI	Centre for Enhancement of Effective Malaria Interventions
CHMT	Council Health Management Team
DCI	Development Cooperation Ireland
DFID	Department for International Development, United Kingdom
DMO	District Medical Officer
DOT	Directly Observed Therapy
EANMAT	East Africa Network for Monitoring Anti-Malarial Treatment
EARN	Eastern Africa RBM Network
EU	European Union
FBO	Faith-Based Organisations
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIPC	Heavily Indebted Poor Countries
HMIS	Health Management Information System
HQ	Headquarters
IEC	Information, Education and Communication
IHRDC	Ifakara Health Research and Development Center
IMCI	Integrated Management of Childhood Illness
LIIMCO	Local Integrated Initiatives for Malaria Control (project in Tanzania)
IPT	Intermittent Preventive Treatment
IRS	Indoor Residual Spraying
KFW	Kreditanstalt für Wiederaufbau, German Development Bank
ITN	Insecticide Treated Net
LLIN	Long Lasting Insecticidal Net
M&E	Monitoring and Evaluation
MC	Malaria Consortium
MIP	Malaria in Pregnancy
MMTSP	National Malaria Medium Term Strategic Plan
MOF	Ministry of Finance
MOH	Ministry of Health
MSD	Medical Stores Department
MTEF	Medium-Term Expenditure Framework
MUCHS	Muhimbili University College of Health Science
NATNETS	National Insecticide Treated Net Programme
NGO	Non-Governmental Organisation
NIMR	National Institute for Medical Research
NMAC	National Malaria Advisory Committee
NMCP	National Malaria Control Programme
PORALG	Presidents Office, Regional and Local Government
PRSP	Poverty Reduction Strategy Paper
PSI	Population Services International
RBM	Roll Back Malaria
RCHS	Reproductive and Child Health Services Programme, Ministry of Health
RMO	Regional Medical Officer
RNE	Royal Netherlands Embassy
SDC	Swiss Development Cooperation
SMARTNET	Strategic Social Marketing for expanding the Commercial Market of ITNs in Tanzania
SP	Sulfadoxine Pyrimethamine (anti-malarial drug)
SWAp	Sector Wide Approach
TA	Technical Assistance

TEHIP	Tanzania Essential Health Intervention Project
TFDA	Tanzania Food and Drugs Authority
TPI	Tanzania Pharmaceutical Industries
TMTL	Textile Manufacturers of Tanzania Limited
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organisation
ZTC	Zonal Training Centre

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[1] 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 Tanzania country Consultative Mission took place from the 12th to 17th October 2003. The mission team comprised: Dr. Alex Mwita (NMCP Manager), Dr. Renatha Mandike (NMCP Epidemics / M&E), Dr. Fabrizio Molteni (NMCP Epidemics / M&E), Dr. Azma Simba (NMCP Vector Control), Linda Nakara (NMCP Vector Control), Karin Kramer (NMCP ITN cell), Suzan Omari (NMCP ITN cell), Dr. Elzeus Kahigwa (NPO Malaria, WHO Tanzania), Ms. Patience Kuruneri (Senior Advisor, RBM Partnership Secretariat), Dr. Melanie Renshaw (Regional Malaria Advisor, UNICEF ESARO and EARN), Dr. Halima Mwenesi (Senior Policy Advisor, NetMark / AED and EARN), Dr. Andrew Collins (Health Systems Advisor, Malaria Consortium East Africa and EARN) and Ms. Notburga Timmermans (consultant, Malaria Consortium).

5. METHODOLOGY

The methodology employed included document review (see Annex 3), interviews with Ministry of Health personnel and partners (see Annex 1) culminating in a Consensus Meeting (see Annex 2). In addition, there was a field visit to two districts, Rufiji and Mukaranga, as well as a visit to a region (Arusha), a Zonal Training Centre (ZTC) (CEDHA Arusha), and a net manufacturer in Arusha (A to Z Textile Mills) (see Annex 6).

Following the Consensus Meeting, the Essential Actions and Country Support Package were revised accordingly and next steps agreed on with the Deputy Minister of Health.

The mission comprised five days, one of which was a national holiday. However, NMCP staff and private sector representatives agreed to work on the public holiday and their commitment is gratefully acknowledged.

[1] 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. Tanzania is classed as a Category One country.

6. SUMMARY SITUATION ANALYSIS

6.1. Malaria transmission and burden

Malaria is the number one cause of morbidity and mortality in Tanzania with an estimated 16 million cases per year resulting in about 100,000 deaths of which 39,000 occur in children under 5 years of age. It accounts for 30% of the National Disease burden, 43% of hospital admissions and 32% of in-patient deaths for children under 5 years. In economic terms it is estimated that Tanzania loses 3.4% of its GDP ($121 million) as a direct result of malaria.

Most of Tanzania is subject to stable transmission with seasonal variation. In the coastal region and for some 100-150 km inland there is perennial stable transmission. However, about 20 districts in highland regions and on the fringes of arid lands, comprising up to 25% of the population, are prone to malaria epidemics, which occur every 4-5 years..

Plasmodium falciparum is responsible for over 95% of malaria infections throughout the country. The most vulnerable groups in areas of stable transmission are children under five years and pregnant women.

6.2. Policy and strategy environment and partnerships

National Health Policy and the National Health Sector Strategic Plan

The Tanzania Development Vision 2025 provides the overarching vision for all social sectors in Tanzania. Among its main targets is the provision of a high quality livelihood through access to quality health services for all and a reduction in infant and maternal mortality rates by three quarters of current levels. It also aspires to raising life expectancy to a level comparable with those attained by typical middle income countries.

The Poverty Reduction Strategy Paper (PRSP) 2000 - 2004 identifies health as a key area. PRSP-related resources represent a significant component of the total resources available to the Tanzanian Government to spend on malaria and other priorities. However, the current PRSP does not mention malaria as a major priority for spending within health, and the NMCP had no involvement in drafting the PRSP. Preparations for the new PRSP will start next year.

The health sector is about to embark on its second Health Sector Strategic Plan (HSSP) (2003-2008) which follows on from the achievements of the first HSSP (1999-2002). The latter placed emphasis on health sector reform to make the sector more efficient and effective through changes in management and financing, and through decentralisation of implementation to district levels under Local Authorities. The new HSSP places more emphasis on service delivery and client satisfaction with a shift in focus towards quality of health services.

Health service delivery now comes under the Ministry of Health (MoH) and the Presidents Office, Regional and Local Government (PORALG). Co-ordination of these two Ministries is facilitated through the position of their Permanent Secretaries as co-chairs of the SWAp and Basket fund finance committees. In addition, teams from the PORALG and MoH Policy and Planning Department work together for the improvement of district health services and infrastructure.

Despite its importance in terms of disease burden, and in contrast with HIV/AIDS, which has its own strategic objective, malaria gets little mention in the new HSSP, subsumed under the Essential Health Package. One indicator under the HSSP is dedicated to malaria - the percentage of uncomplicated and severe cases for groups most at risk. While malaria control will undoubtedly

benefit from most aspects of health systems strengthening contained in the plan, this low profile of malaria is regrettable.

The National Malaria Medium Term Strategic Plan (MMTSP) (2002-2007) represents a road map for malaria control in Tanzania over a five year period with the aim of reducing mortality and morbidity due to malaria in all 21 regions of the country by 25% by 2007 and by 50% by 2010. The strategies in this document are in line with those of RBM. However, there is some discrepancy between the target dates in the plan (to be reached by 2007) with those of the Abuja Declaration. [2]

New policies for anti-malarial drugs were adopted in 2001 and for ITNs in Nov 2000[3] No communications strategy exists and this is noted by the NMCP and partners as a major gap. While there have been moves towards the setting up of Malaria Early Warning Systems (MEWS) and Early Detection Systems for Epidemics in those districts affected, there is no clear strategy or guideline for use of IRS. This lack of policy guidance on IRS may pose problems in the future if political pressure for its introduction leads to its indiscriminate and inappropriate use.

Partnerships

The RBM partnership in Tanzania is broad based, consisting of the MoH, the private sector, research institutions, multilateral and bilateral organisations and NGOs. Current partners include: WHO, UNICEF, DFID, JICA, Swiss Development Cooperation, Italian Cooperation, Development Cooperation Ireland and USAID. Included among the research institutions are National Institute for Medical Research, IHRDC (Ifakara Health Research and Development Center), Kilimanjaro Christian Medical Centre (KCMC) and Centre for Enhancement of Effective Malaria Interventions (CEEMI).

Within the Ministry of Health there has been increased collaboration with the Reproductive Health Services Unit (RCHS) and IMCI. This latter relationship has been strengthened at the national level through the initiation of an Annual Malaria IMCI Conference in March 2003 [4]. Links have been developed with EPI. Links with Zonal Training Centres (ZTC), and research institutions need to be strengthened further.

A number of structures and coordinating mechanisms have been set up by the NMCP to ensure that the potential of partnerships is maximised and that the various social, economic and developmental aspects of malaria control are catered for.

National Malaria Advisory Committee (NMAC)
The NMAC is composed of key ministries, development partners, research institutions, representatives from the private sector, NGOs, and voluntary agencies. The NMAC is mandated to meet twice a year but since the start of 2002 it has not been meeting regularly. The NMAC function is to advice the government on malaria control. At the last meeting of the NMCP of 5 November, it was agreed that a small task force would look at the functions of the NAMC to see how it can function better and more effectively raise the profile of malaria. This review may result in a modified TOR for the NMAC.

Inter-Agency Malaria Coordinating Committee (IAMCC)
This committee consists of the RBM partners and is coordinated by the MoH. It is mandated to

[2] The targets set by the MMTSP reflect what the programme felt could be achieved realistically within five years (2002-2007). The year 2005 will be mid-way through the MMTSP time frame and interventions will be evaluated in line with the Abuja targets.
[3] MoH Nov 2000 : Taking Insecticide Treated Materials to National Scale in Tanzania
[4] MoH, March 2003: “Malaria and IMCI: The District Challenge” First National Malaria and IMCI Conference Report.

meet three times a year and to address issues of planning, monitoring and evaluation (M&E) and funding linkages. The committee is yet to meet and is deemed unnecessary by the NMCP who feel that the functions can be covered within the ITN task force meetings. However, the ITN task force focuses on ITN issues and does not cover wider issues related to malaria prevention and control, nor does it include partners active in those other fields (e.g. drug manufacturers). The IAMCC was discussed at the last NMAC meeting and a task force of eight people was selected to further define its roles and responsibilities. The first task force meeting will take place in January 2004.

Malaria technical committees and task forces
Four committees have been established to address the main strategic areas of malaria control: Case Management (clinical management); Vector Control, including a sub-cell for ITNs; Monitoring and Evaluation; and IEC. The ITN cell has been set up to co-ordinate all ITN activity in the country, including the National Voucher Scheme, and is supported by a number of donor agencies. The ITN cell coordinates ITN task force meetings, which include a wide range of partner agencies. The M&E cell has established a monitoring and evaluation network to facilitate the monitoring of progress made towards achieving the malaria control targets. The network includes different institutions working on demographic surveillance in the country who are directly or indirectly involved in malaria control. The network has met twice since it was established and has been involved in the recent evaluation of malaria interventions in nine sentinel sites in the country (May-June 2003).

Government / NGO partnership on malaria related activities still needs to be improved. NGOs feel that the government does not recognise the contribution of NGOs to the fight against malaria. They feel that the government does not fully engage NGOs in policy and operational issues such as the Global Fund application or the evaluation of various programmes, nor does the government include NGOs in the dissemination lists for research results, new information on malaria, etc. Coordination with Faith-Based Organisations (FBO) was not apparent from discussions or review of reports. Most of these organisations are facility based and are supported by the PORALG and included in training carried out at district level and below. Recently, NGO representatives with interests in malaria control have created the NGO Malaria Forum to coordinate their activities. One of the first tasks of the Forum is to undertake a mapping exercise of all the NGOs who are active in the field of malaria control. Documentation of experiences will also be undertaken.

Partnership between NMCP / MoH and the private sector commercially linked to malaria interventions (local manufacturers of nets and drugs) has shown considerable recent improvement but could be further developed. Partnership has not yet been extended to include a wider group of elements, including companies interested in malaria-in-the-workplace programmes and/or in sponsoring malaria interventions through financial / material / technical support.

Some development partners feel that coordination of technical assistance coming in from abroad needs to be strengthened.

6.3. ITNs and other vector control measures

The ITN Strategy emphasises public private partnerships in developing a sustainable ITN market that will lead to nation wide coverage. The public sector is responsible for ITN promotion, distribution and equity while the private sector will invest in production delivery and sales infrastructure. The Strategy advocates for a mix of approaches, including generic promotion and demand creation to support public and private sector provision of ITNs, and targeted subsidies for vulnerable groups delivered in conjunction with other health packages, e.g. ANC.

Two large social marketing projects have been successful in promoting ITNs in the country and

creating a favourable environment for scaling up. Currently ITN interventions are being scaled up nation wide through the National Insecticide Treated Net (NATNETS) Programme which is coordinated through a steering committee which involves both the private and public sector. A larger (multisectoral) consultative group meets twice a year to oversee all ITN activities.

NATNETS is fully operational and made up of three components:

1. *The ITN cell*
   The ITN Cell within the NMCP, supported by the Swiss Agency for Development and Cooperation (SDC) through the Swiss Tropical Institute (STI), is responsible for the overall co-ordination of all ITN activities in Tanzania, including the Voucher Scheme.
2. *Tanzania National Voucher Scheme (TNVS)*
   The Tanzania National Voucher Scheme (TNVS) is supported by the Global Fund (GFATM), and is currently being piloted by UNICEF in 2 districts. It is a national programme that will enable every pregnant woman in Tanzania to purchase an ITN at a greatly reduced price (a mother will pay 500 - 1,500 Tsh (USD 1.50) while the voucher price is 2,500 TSh. = USD 2.50) and will provide free insecticide re-treatment kits at two vaccination milestones of the infant (3 and 9 months). The programme is expected to be launched in early 2004. Currently the contractors for the different components are being selected through a competitive bidding process.
3. *SMARTNET*
   The SMARTNET (Strategic Social Marketing for expanding the Commercial Market of ITNs in Tanzania) project is implemented by PSI, and supported by the Department for International Development (DFID) and the Royal Netherlands Embassy (RNE). SMARTNET assists Tanzanian net manufacturers to expand their wholesaling and retailing network in the country, especially in rural areas. These companies have agreed to sell only 'bundled nets' (a mosquito net together with a treatment kit) to the local market in the country. The SMARTNET strategy encourages rural market penetration of bundled nets including through the use of market traders who sell them to communities at shifting markets.

Tanzania has three net manufacturing companies (A to Z, Sunflag, TMTL) producing over 4 million nets per year with more than half of the production being exported outside the country. Locally manufactured nets are widely available in Tanzania, including in small stores. The challenge remains to increase coverage of nets and use of insecticide treatment, particularly in the rural areas.

A to Z, a net manufacturer based in Arusha, recently commenced production of a WHOPES approved Long Lasting Insecticidal Net (LLIN), the Olyset™ Net, under a technology transfer agreement with the Sumitomo Chemical Corporation of Japan**.** Production commenced in September 2003 and an official launch is expected early in 2004. At full production capacity the factory is expected to produce 100,000 Olysets per month. The pace at which these LLINs become available on the market in Tanzania will have consequences for the current net promotion and re-treatment systems, as these nets do not require re-treatment during their lifetimes (estimated at five years or more).

Although Tanzania received international praise for being one of the first countries to create a favourable taxes and tariffs environment for ITNs, recent legislation amendments have changed the status of locally manufactured nets at the point of sale from 'zero rated' to 'exempt from VAT'. This means that nets are VAT-free at the point of sale, but that manufacturers cannot claim back the VAT on their raw materials or overheads.

6.4. Access to effective treatment

Tanzania implemented an interim change in anti-malarial drug policy in 2001, introducing

Sulphadoxine Pyrimethamine (SP) as the first line anti-malarial. Availability of the new guidelines and anti-malarial drugs at health facilities is high and the majority of health workers have been trained in the new policy. The new first line treatment SP initially received some negative media coverage concerning adverse side effects and as a result there has been some concern about safety among the Tanzanian population. However, these concerns appear to be in decline. With increasing resistance to SP being reported at sentinel sites over the last three years, the NMCP recognises that the current policy cannot be more than an interim measure. In the medium term, Artemesinin based Combination Therapy (ACT) will need to be introduced and preparations for this future policy change need to be initiated soon as the process typically takes two to three years. Preparation for drug policy change has been highlighted as a priority by RBM partners in Tanzania.

Coverage for IMCI implementation is very high with most of the 121 districts and 4,122 health workers orientated on IMCI. This has led to documented improvements in the case management of malaria in children under 5 years at health facility level. Community IMCI is progressing at a much slower pace. C-IMCI provides an opportunity for implementing effective communication on early treatment seeking behaviour and ITN use at community level. Inadequate public knowledge or use of available knowledge on early recognition and correct treatment is recognised by the NMCP as a major problem and obstacle to reaching the Abuja targets. Plans are being formulated to tackle this deficiency through an effective communication strategy.

Anti-malarials for home treatment are available at drug stores, general shops and kiosks, but few shopkeepers (15%) are correctly informed on anti-malarial treatment.

Quality of anti-malarial drugs remains an important constraint in achieving higher coverage in access to effective treatment by children under five years. The local pharmaceutical market in Tanzania is responsible for providing 40% of government requirements. The Tanzania Food and Drug Authority (TFDA) with the assistance of WHO and USAID, has established six zonal mini-labs and trained inspectors. The scheme is one year old but failure rates for anti-malarials, particularly SP, are still high at 10% of which 80% are manufactured locally.

6.5. Malaria in pregnancy

A malaria in pregnancy policy, strategy and an orientation package are available at the NMCP and the RH department. In the districts visited, use of IPT, promotion of ITNs for pregnant women and treatment guidelines were evident. Reproductive Health has guidelines for prevention of anaemia in pregnancy.

Communities and health providers are generally not aware of the consequences of malaria in pregnancy in terms of morbidity and mortality. However, they are aware of the availability of malaria preventive measures in pregnancy. About 74% of pregnant women are using one or both of the recommended preventive measures (net + IPT 26%; net only 31%, IPT only 35%). Antenatal attendance is high (more than 80%) and guidelines on IPT in pregnancy are available. [5]

IPT was introduced in 2001 after a baseline survey. As is the case with ITN use, the level of education seems to influence the use of IPT in pregnancy. Higher IPT coverage was observed in women with higher levels of education. In order to increase IPT coverage further, more advocacy will be required to avoid potential confusion amongst pregnant women arising as a result of the proposed change from a 2-dose to a 3-dose regimen. The use of directly observed therapy (DOT) is expected to increase compliance on the use of SP for IPT among pregnant women. However, correct implementation by facility staff of Focused Antenatal Care and Malaria in Pregnancy is

[5] Source: M & E conducted in 2003

hampered by staff shortages (particularly nurses) and inadequate supervision from the district level, particularly to the private sector. In addition, IPT will only be effective if the SP used is of adequate quality.

The NMCP and Reproductive Health together have developed a focused antenatal care training manual incorporating MIP preventive measures. The manual has already been disseminated to all district ANC clinics and is now used for cascade training of Maternal and Child Health workers.

The introduction of the ITN voucher system within the NATNETS programme is expected to bring ITN coverage amongst pregnant women to 60% in time to fulfil the Abuja targets. It is also expected to lead to increased uptake of ANC services.

Management of malaria and fever in pregnancy is included in the national guidelines for diagnosis and treatment of malaria. Screening for signs and symptoms of malaria is a routine part of antenatal care.

6.6. Malaria in emergencies

The National Malaria Medium Term Strategic Plan focuses on two strategic approaches for malaria epidemic prevention and control: the establishment of an early warning and detection system in malaria epidemic prone districts, and the establishment of adequate prevention and control responses to malaria outbreaks in epidemic prone districts. Specific interventions in the event of a malaria epidemic include IRS and intensified case management activities.

Nine epidemic prone districts have been selected for application of targeted interventions, and surveillance and early detection systems are in place in each of them. In addition, contingency stocks of vector control equipment, drugs and medical supplies have been ordered for storage at the MSD as a component of central level epidemic preparedness. Districts have responsibility for preparing their own epidemic prevention and control plans within their comprehensive district health plans. Funds for implementation will be solicited by districts from relevant RBM partners. There is currently no capacity at district and regional levels for deployment of vector control measures.

Community members are expected to participate in the collection and reporting of information that may indicate a malaria outbreak. In addition, they may be called upon by Village Health Committees to engage in the delivery of control interventions in the event of an epidemic.

The Epidemic Detection System (EDS) would benefit from more extensive evaluation. It was also noted that more community participation is needed in the drafting of emergency preparedness plans, as well as more capacity at district and peripheral level on control measures.

6.7. Supportive strategies

Monitoring and evaluation

Whilst there are many sources of malaria data in the country, the current Health Management Information System (HMIS) is faced by major constraints despite some progress in its development over the last few years. Consequently, the NMCP are not receiving regular malaria updates from HMIS in a timely fashion, but only on annual basis. In addition, the NMCP does not have its own malaria database. However, all districts do have personnel trained in HMIS and have been provided with computers to enable them to collect, store and analyse data from health facilities and so opportunity exists to develop the HMIS into an effective tool for reporting and planning. The HMIS is currently under revision and it is essential that the NMCP has input into the process to ensure

that, where possible, data for reporting against Abuja and other international targets, is included. This is particularly true for IPT, which is not currently included. Furthermore, a task force to be set up by the MOH with the purpose of reviewing the entire M & E system for the health sector is yet to be established. The NMCP has established an M & E cell to jump start the process for the NMCP.

6.7.1. Over the years, there has been a good rapport between the NMCP and the malaria research community which has lead to the uptake of some research findings and their translation into policy. Links between research and policy implementation should now be further strengthened. What is lacking is a dedicated research desk within the NMCP which can act as a bridge or interface between the program and the malaria research community and also with the HMIS and the planning and policy departments. Research

Tanzania has the largest and most active malaria research community in Africa. It also has a comprehensive research Country Strategic Plan for 2002-2007. The challenge is now to move from studying and planning to effective action on a national scale, especially at the district and community level. However, although operational research is carried out extensively, it is not adequately co-ordinated to effectively support district level planning and implementation. Inadequate human and financial resources at the district level were reported to be a constraint for operations research utilization, as well as a major lack of skills of district teams to properly implement evidence based interventions.

Operational research is therefore clearly highlighted as an important area for support within the MMTSP and there is willingness by partners to finance further research on malaria.

The major challenge for RBM within the context of Tanzania's research / monitoring and evaluation capabilities is the necessity to carry out stand-alone M & E of its activities which are not captured by routine HMIS data collection (e.g. IPT).

Communication

Advocacy, awareness and communication efforts at all levels have been identified as significant constraints to improving health outcomes. Advocacy regarding HSR is still required at all levels of administration, governance, leadership and implementation. Information sharing and dissemination of RBM strategies, malaria control programme activities and malaria in general, need to occur in a more systematic and co-ordinated way.

A large proportion of the predominantly rural population have limited access to information and live within a social context such that traditional beliefs and taboos that restrict adequate utilisation of health facilities serve to adversely affect uptake of malaria control measures. Awareness about the signs and symptoms of malaria, risk groups (especially pregnant women), rapid treatment seeking behaviour and malaria prevention, including mosquito net re-treatment is low. In addition, concerns exist about the safety of SP. There is an urgent need for intensified communication on malaria.

An integrated communication strategy for malaria and IMCI should be developed in line with current best practices, including interpersonal participatory processes. A number of communication methodologies, including participatory drama and dance, community dialogue and others, are currently being implemented by NGOs and CBOs. Lessons could be learned from other successful awareness campaigns such as the one undertaken for HIV/ AIDS and well-established School Health Programmes. Mechanisms established for these programmes, such as Regional and District Co-ordinators, may be used for malaria interventions. The MoH Health Education Unit (HEU) and

other institutions could contribute to development and printing of communication materials. The government and partners are willing to support communication activities.

6.8. Malaria control and health systems

Organisation of malaria control

National level

Organisationally, the NMCP comes under the Vector Control Unit, a Unit within the Epidemiology and Disease Surveillance Section, the head of which reports to the Director of Preventive Services. This relatively low position of the NMCP within the organisational structure of the Ministry of Health seems to be a major impediment to effective performance. The NMCP is reported to have little influence on policy or strategic decisions on malaria control and insufficient autonomy to allow it to negotiate with multilateral and bilateral sources of support. The NMCP is unable to advocate effectively for malaria control as it does not have the profile or authority to establish effective linkages or co-ordinate key partners in malaria control, such as the World Bank, NGOs, etc. Furthermore, the low position of the NMCP results in a situation in which the process of accessing funds is lengthy (it takes up to 3 weeks to get a cheque signed), which hampers the NMCP's funding disbursement capacity.

A recent study has recommended raising the profile of the NMCP to allow it to engage properly with these important strategic partners but the conclusions and recommendations of this report have been resisted in the MoH [6]. It is important that the findings of the profiling study are widely distributed and formally presented to the MoH and that this is done soon in order to ensure that the recommendations are considered for incorporation into the current restructuring plans of the MoH.

The malaria programme is currently located in offices far outside the centre of town which and this has been a cause of concern as it contributes to the perceived low profile of the NMCP within the MoH. However, the programme is soon to be housed within the same building as the new offices of NIMR located in the city centre and will have a training room, reference laboratory and resource centre.

Regional level

The Regional Medical Officer/ Health Specialist is responsible for technical support to the districts as well as giving support in planning, budgeting and carrying out support supervision activities. The districts receive technical support and supervision from the National and Regional levels.

From interviews conducted during the field trip component of the Country Consultative Mission, it appears that national level support to districts is infrequent. This is understandable given the large number of districts and limited human resources at the centre. Regional support occurs on a quarterly basis, but the depth of support to malaria control is considered insufficient. There is limited human capacity at the Regional level for support supervision, both in terms of numbers (only one officer is responsible for all technical support for most communicable diseases) as well as in terms of updated knowledge of malaria control strategies of the remaining team members (they also need updating in evidence based effective malaria control interventions and RBM).

District level

The District Medical Officer holds the main responsibility for implementation of the MMTSP. In the past 2 years, a Malaria Focal Person has been identified in each of the 121 districts to act as a focal point for malaria control activities. Most of these Malaria Focal Persons are environmental

[6] MoH NMCP Tanzania: *The Profile and Productivity of the National Malaria Control Programme*

health officers. Malaria Focal Persons have been given the responsibility for planning and supervision of community malaria control activities and interventions.

Planning for malaria control at district level is well catered for through the improvements in planning activities based on the important lessons of projects such as Tanzania Essential Health Interventions Project (TEHIP). This approach has been very important in Tanzania in terms of strengthening systems while ensuring that malaria is appropriately prioritised according to burden of disease. It is intended that the TEHIP evidence-based planning methodology be rolled out to remaining districts within the next year.

Community level

The structures involved in malaria control at community level include Village Councils, Primary Health Care (PHC) committees, Ward Development Committees, private providers of drugs, Community Owned resource Persons (CORPS), projects and Faith-Based Organisations (FBOs). To date, the engagement of communities in malaria control by the NMCP has not been strong. This has been recognised as a gap, particularly in relation to improving early care seeking behaviour and use / re-treatment of ITNs. Collaboration with community components of existing programmes such as IMCI (C-IMCI) and community agents outside of the health sector should be increased.

Health systems development

Health systems development has been the key focus of the reforms implemented by the MoH and health development partners. Sector Wide Approaches are their agreed method of work in implementing these approaches with funding through a common basket.

An annual health sector Plan of Action is prepared based on available resources and previous year's performance. The Malaria Annual plan, developed from the Malaria Mid Term Strategic Plan, will be integrated into the Directorate for Preventive Services' annual plan that in turn will be integrated in the MoH annual Mid-Term Expenditure Framework (MTEF). Progress in implementation of the Malaria Annual Plan is examined annually with other MoH priorities during the annual review of the health sector (taking place in March of each year).

Up until recently, the ability of the districts to plan and implement malaria control activities was noted to be weak. However, capacity building over the past year has improved this situation and more districts are planning according to the evidence based planning model developed by TEHIP. Malaria control activities are catered for in the planning guidelines from the MoH but these guidelines are brief and in need of elaboration to ensure that the districts include comprehensive and evidence based activities in their plan. The Regional Medical Offices can offer this support to districts for planning along with supervision activities. However, they will need to be updated to enable them to offer effective support to districts. The Zonal Training Centres (see below) are ideally positioned to strengthen the capacity of regional and district level health workers for malaria control and HMIS.

Human resources

Overall there is a chronic shortage of human resources at all levels of the health system in Tanzania with the minimum staffing norms unfulfilled. In addition, there is inequitable distribution of existing personnel between urban and rural areas. Efforts have been made to address this problem as part of the on-going health sector reform process with staffing norms, guides or standards for specific tasks at different levels of health care delivery having recently been revised. In addition, civil service reforms and local government reforms have resulted in increased salary levels. Health facility staff are no longer civil servants but are employed by the local authorities. Mechanisms have been established to attain a fairer geographical distribution of human resources and associated

skills mix. Progress in this area needs to be quantified and further actions defined as necessary.

At national level, the deficiencies in the NMCP have been highlighted in a recent study and reiterated by the NMCP in their presentation to the RBM team. The inadequate human resource capacity within the NMCP has resulted in a low capacity to absorb additional resources and subsequently to effectively implement activities. The report recommends the recruitment of qualified and experienced senior officials in key co-ordination functions, assisted by technical advisors where needed, and by middle level officers to co-ordinate and or facilitate the implementation of malaria control. The main positions that the NMCP has identified as requirements are an epidemiologist, an administrator, a health communications expert and a data manager. All of these positions are new and have to be approved by the MoH and consequently by the Civil Service and Ministry of Finance. Presently, the MoH is undergoing a restructuring process and it is vital for the NMCP to ensure that they have their proposed new positions included in the new structure.

As part of health sector reforms, six Zonal Training Centres (ZTC) have been created which are charged with human resource capacity building, including providing continuing medical education of all cadres of health staff [7]. The second HSSP (2003-2008) provides for a full network to be established with the aim of short term capacity building as well as initiating distance learning courses. The ZTCs of Iringa and Arusha, which have received considerable support from donors over the years, have been playing a key role in the training of CHMTs on district health planning. The remaining ZTCs are not as well developed and are in need of infrastructural development support.

The NMCP has also highlighted the potential role of ZTCs as a solution to training of the newly appointed District level Malaria Focal Persons.

The NGO sector is another important source of human resources for malaria control which tend to be overlooked or excluded due to poor coordination mechanisms. These groups have many experiences of malaria control implementation at community level, which can be utilised to develop best practices and ensure that they are replicated in an appropriate manner. In addition, technical expertise is available from institutions like Ifakara health research centre.

Logistics

Provision of drugs and supplies from the centre to the periphery is the responsibility of MSD (Medical Stores Department) and is now running smoothly, with anti-malarial drugs stock outs becoming very infrequent. On the other hand, referral facilities are inadequate in the health sector, due to difficulties of transport in rural areas, especially for pregnant women.

Financial resources

Funding of malaria control is integrated within the MOH central budget and complemented by the PORALG allocations to districts CHMTs.

Funding channels include:

1. MOH
    - o Preventive Services
        - malaria prevention and control
    - o Curative Services
        - drugs and medical supplies and distribution systems
        - referral and specialized hospitals

[7] MoH/HERA, March 2003 'Technical Review of Health Service Delivery at District Level'

- Human Resource Development
- HMIS

2. PORALG allocation to 121 CHMTs
3. TFDA for drug quality assurance
4. Research institutions (NMRI, IHRDC)

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Renewed confidence in the Ministry of Health and the Government resulting from health sector reform has encouraged increased donor support with the result that significant new resources are now available through a SWAp. External funding for malaria control is primarily given through the joint health sector basket fund involving participation of DANIDA, Development Cooperation Ireland, Swiss Development Cooperation, World Bank, KfW (German Development Bank) and the Royal Netherlands Embassy. DFID and EU are providing general budget support to the GOT via the MoF.

The Basket Fund provides funding to the MoF for the MoH / central level and for the districts, who receive USD 0.50 per inhabitant. District funds are channelled through the PORALG, with the District Executive Directors (DED) being responsible for the management and allocation of funds in their district. Funding through the Basket Fund is about USD 26 million for FY 2003. Other RBM partners such as USAID, Italy, JICA, WHO and UNICEF continue to support malaria control through direct agreements with the MOH. A grant of USD 19.8 million from the Global Fund to fight AIDS, Tuberculosis and Malaria, approved in 2002 with a first disbursement effected in March 2003, provides additional funding for scaling up of ITNs.

The MMTSP budget requirement for the period 2002 - 2007 is USD 76 million, of which USD 21 million is to be directed to 121 councils (districts) for district implementation. While malaria control is receiving more funding than before, GOT and donor funding (Basket Fund and other sources) remains significantly lower than requirements projected by the MMTSP at USD 13.7 million for FY04: the GOT is currently allocating about USD 1 million per fiscal year over the period 2003-2005 (MTEF April 2003). Concerted GOT and RBM partner efforts are essential to ensure adequate and timely response to funding requirements of the NMCP as capacity for more effective implementation is built.

7. ABUJA TARGETS - WILL THEY BE MET?

The Abuja targets (2005) are as follows:

- 60% of under-fives with fever receiving correct malaria treatment within 24 hours by 2005
- 60% of children under five and pregnant women sleeping under ITNs by 2005
- 60% of pregnant women receiving chemoprophylaxis or intermittent anti-malarial treatment (IPT) by 2005

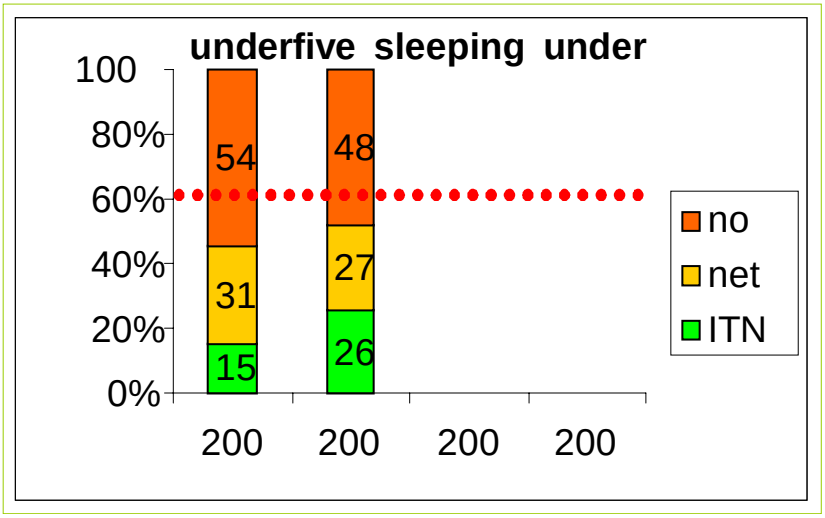
The Malaria Medium Term Strategic Plan (MMTSP) targets are as follows (and are therefore broadly in line with the Abuja targets, although the reporting dates are different):

- 60% of under-fives with fever to receive correct malaria treatment within 24 hours by 2007
- 60% of children under five and pregnant women sleeping under ITNs by 2007
- 60% of pregnant women receiving IPT by 2007
- By 2007 all epidemic-prone districts will have increased their capacity to detect malaria epidemics early and contain them

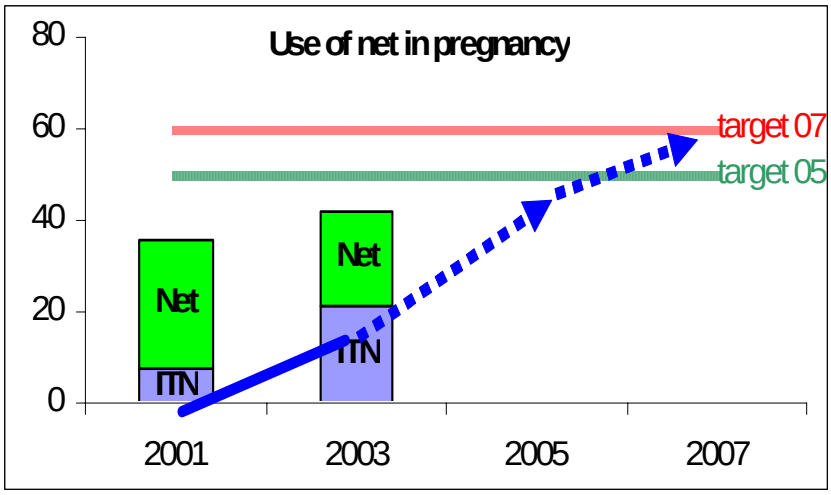
7.1. ITN coverage among under-fives and pregnant women

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	• Coverage is 15%. [8]
2003	• Scaling up of social marketing of ITNs implemented through partners • Increased communication using different channels • Subsidised treatment kit and compulsory bundling of insecticide kit with net • Waiving of taxes and tariffs on ITNs, nets and materials • Monitoring of implementation • Coverage increases to 26%
2004	• Launch of the Tanzania National Voucher Scheme by early 2004 • 100% of health workers trained on the National Voucher scheme • Intensified communication on importance of insecticide treatment of nets • Increased distribution of ITNs through the commercial sector especially in rural areas • Increased mass media and communication on malaria, including to pregnant women and children Waiving of taxes and tariffs on ITNs, nets and materials • Monitoring of implementation • Target groups are using ITNs • Coverage increases to 40%
2005	• Social marketing of ITNs and insecticide continued countrywide • Increased distribution of ITNs through the commercial sector • Roll out of the Voucher Scheme to all regions in Tanzania by mid 2005 • Intensified communication on importance of insecticide treatment of nets • Sustained mass media and communication on malaria, including to pregnant women and children • Waiving of taxes and tariffs on ITNs, nets and materials • Target groups are using ITNs • Introduction of Long Lasting nets • Midterm evaluation • Coverage increases to 60%.



[8] Coverage estimated based on data from situation analysis carried out in nine districts in 2001.

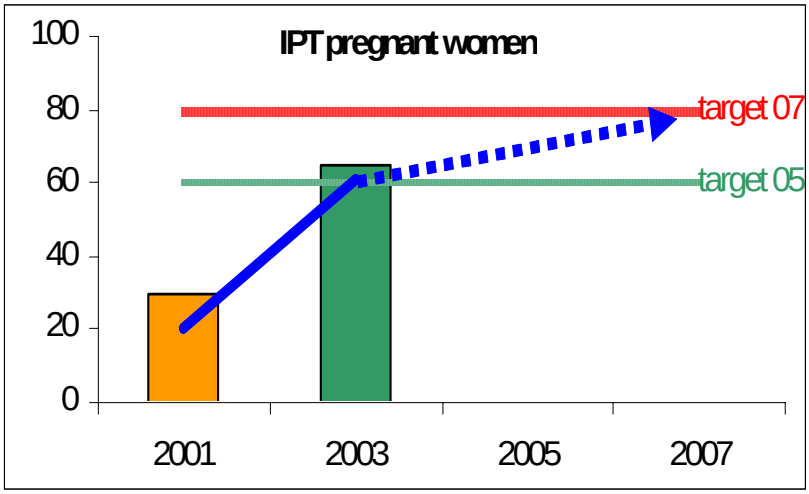


7.2. IPT coverage among pregnant women

It is estimated that by the end of 2005, 60% of pregnant women will be receiving 2 doses of IPT (IPT1 and IPT2) if the following occurs:

Year	Assumptions and actions
2002	• Coverage is 29 % (both doses) [9]
2003	• Availability of training manuals and guidelines in peripheral health facilities • Development of additional communication materials and dissemination • Training and constant supervision of health workers / MCH service providers • Advocacy to population through different media in the country • Advocacy to health providers through RHMTs and CHMTs • Adequate supply of SP • Monitoring of implementation • Coverage increases to 65%.
2004	• Health workers use guidelines correctly • Country wide training of health workers • Adequate supply of SP. • SP remains effective • SP for IPT given under supervision (DOT) • Community concerns about SP removed by effective communication strategy • Pregnant women recognise that they are at risk of malaria and know how to prevent it through effective communication strategy • National Voucher Scheme increases uptake of ANC by mothers • Monitoring the implementation • Coverage increases to 75%.
2005	• Health workers use guidelines correctly • Adequate supply of SP. • SP remains effective • SP for IPT given under supervision (DOT) • Community concerns about SP removed by effective communication strategy • Pregnant women recognise that they are at risk of malaria and know how to prevent it through effective communication strategy • National Voucher Scheme increases uptake of ANC by mothers • Monitoring and evaluation of the programme • Coverage increases to 85%.

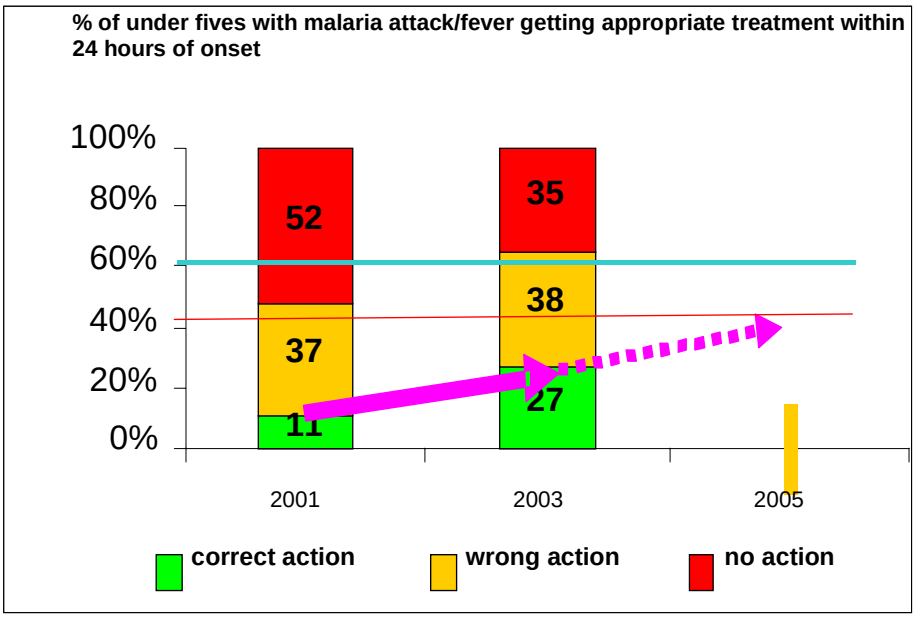
[9] Coverage was estimated based on available data from situation analysis.



7.3. Access to effective treatment for under-fives

It is estimated that by the end of 2005, 45% of under-fives with fever will be receiving effective treatment within 24 hours if the following occurs:

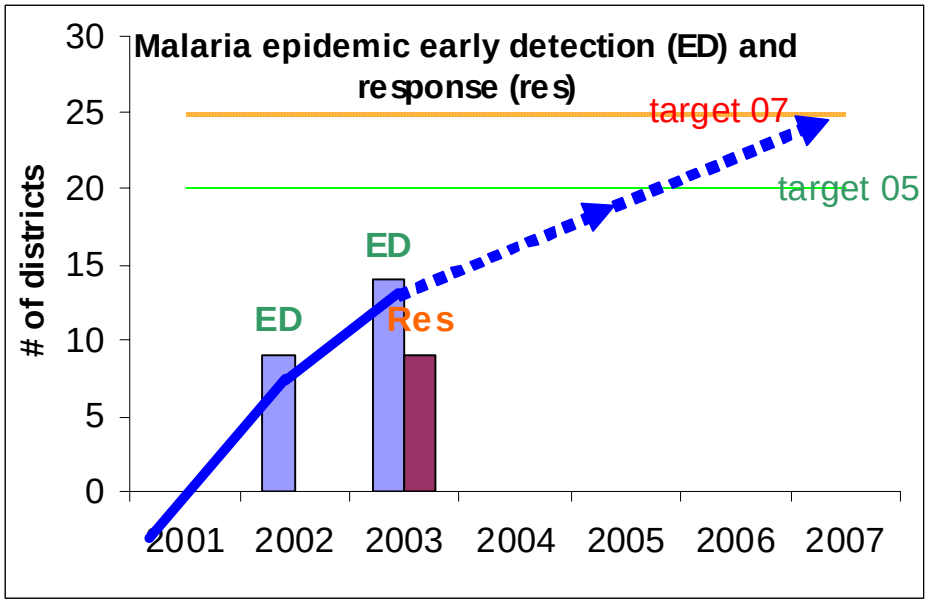
Year	Assumptions and actions
2002	• Coverage was estimated based on available data from situation analysis • Coverage is 20%.
2003	• Informal private sector supply effective SP and other anti-malarials, particularly to rural communities • Communication programme implemented and materials distributed and used by the community and health providers including the private sector • Increased community awareness about the signs and symptoms of malaria, high risk groups, early care seeking behaviour and correct initial management in the home • Recent training of health workers on appropriate case management and distribution of guidelines is augmented by effective on going support supervision by CHMT • Maintenance of good supply of effective SP, Amodiaquine and Quinine and other essential supplies necessary for management of malaria cases available in health facilities • Quality control of drugs routinely carried out • Coverage increases to 27%.
2004	• Informal private sector supply effective SP and other anti-malarials, particularly to rural communities • Increasing impact of the IEC strategy on community health seeking behaviour, fears of SP and appropriate initial management • Maintenance of interventions outlined in 2003 • Awareness on malaria and the risks to under five children increased through effective implementation of communication strategy • Laboratory diagnosis for malaria functional in appropriate levels of health care delivery • Continued efficacy of anti-malarials drugs • Coverage increases to 35%.
2005	• Same as for 2004 • Improving effectiveness of implementation of IEC with appropriate actions at community level for malaria case management • Continued efficacy of SP and other anti malarials drugs • Coverage increases to 45%.



7.4. Effective management of epidemics

It is estimated that by the end of 2005, 80% of epidemic-prone districts will have a functional system for early detection and response of malaria epidemics:

Year	Assumptions and actions
2002	• Coverage was estimated based on available data from situation analysis carried out in 2001 • 32% of epidemic prone districts started epidemic early detection process.
2003	• Malaria data from districts prone to epidemics available and correctly managed at health facility level • Health staff aware and able to early recognise, verify and report impending malaria epidemics • Coverage increases to 56%.
2004	• Retrospective malaria data from the remaining districts prone to epidemics are available, adequate and correctly managed at health facility level • System for early warning and detection of malaria epidemics verified • Agreement with Tanzania Meteorological Agency for data sharing operational • Health workers collect, analyse and interpret data appropriately • Health workers correctly use the system and are able to verify and report impending malaria epidemics • District malaria profile data base updated regularly • CHMTs carry out support supervision regularly to health facilities • Communication system between health facilities and CHMT functional • Preparedness plans incorporated in Council Health Plans • District and peripheral health staff capable to undertake vector control measures such as IRS • Community sensitised on recognition and management of malaria epidemics and able to collaborate in malaria containment actions in case of emergency • Contingency stock of drugs, chemicals and reagents in place and/or easily mobilised from central/zonal stocks • Guidelines on Epidemic preparedness and control available and used at district level & health facilities • Monitoring carried out by NMCP • Coverage increases to 68 %.
2005	• Same as for 2004. • Coverage increases to 80%.



7.5. Summary

Coverage levels for the key interventions are increasing. If the NMCP and its partners are able to access Global Funds effectively and efficiently and cooperation and coordination is maximised at central and at district level, it is envisaged that Tanzania will likely achieve the Abuja targets for ITNs and IPTs by the end of 2005. The Abuja target for appropriate treatment will most likely not be achieved.

8. THE ESSENTIAL ACTIONS

The essential actions given below are those deemed necessary by the RBM Country partnership, by the Eastern Africa RBM Network (EARN) and RBM Secretariat to accelerate implementation and reach the coverage rates given in the previous section.

It should be emphasised that the gaps, resource requirements and essential actions identified by the Country Consultative Mission are additional and complementary to those currently planned and budgeted for within existing resources in the country, including Global Fund monies. Funding from the GFATM (US$19,827,716) is being used to support the National ITN Implementation Plan, including the Voucher Scheme for ITN subsidy. The ITN Strategy comprises three complementary components: support for private sector growth (manufacturing, wholesale and retail), national behaviour change and awareness campaign, and targeted subsidy for the most at risk groups.

8.1. Communication strategy

Developing an integrated comprehensive communications strategy on malaria is a priority intervention for Tanzania. Key steps include collection of data on perceptions and health-related attitudes to malaria control, documentation of existing communication materials and methodologies, development of a draft communication strategy and implementation plan, and obtaining consensus from all stakeholders on the communication strategy. Communication can be thought of as comprising three separate but inter-linked components, namely

1. Advocacy to raise the profile of malaria among politicians, potential partners, etc
2. Information sharing and dissemination among partners
3. Communication designed to influence behaviour of individuals (includes mass media,

theatre and songs, interpersonal participatory communications, etc.)

- Development of communication strategy and implementation plan (USD 54,000)
- Strategy implementation including training, workshops, media, materials (not yet costed, to be costed by March 2004 following strategy development)

8.2. Change in drug policy

To maintain improvements in access to effective treatment in the face of declining efficacy of the current 1st line anti-malarial drug SP, there is a need to begin planning for the next drug policy change and implementation of Artemisinin Combination Therapy (ACT). Key steps that will need to be taken include collection of baseline information on potential ACTs, reaching consensus on the new policy through a Consensus Meeting, funding of proposal development, development of guidelines and IEC materials, advocacy activities, orientation of health workers and follow up supervision.

- Preparations for the next anti-malarial drug policy change (USD 2,135,000)
- Procurement of ACT drugs (not yet costed)

8.3. Anti-malarial drug quality

In order to address concerns over quality of anti-malarials, the Tanzania Food and Drug Authority (TFDA) with the assistance of WHO and USAID, has established eight zonal mini-laboratories and trained inspectors. In order to carry out the work effectively, the TFDA central laboratory and its Zonal laboratories need to be strengthened with extra equipment and TFDA Zonal Antimalarial Programme Coordinators need to be appointed in each of the eight zones.

- Strengthening of central TFDA laboratory through the purchase of additional equipment and ensuring funds available for maintenance (USD 68,715)
- Support to the TFDA Zonal Antimalarial Programme Coordinators, by providing supervision allowance, office equipment and transport facilities (USD 194,480)

8.4. Profile, Position and skills mix of NMCP

In order to allow the NMCP to engage fully with important strategic partners, it is crucial that its profile be raised, both internally within the MoH and externally with partners. Also communication channels within the MoH need to be shortened and access to resources increased / accelerated.

In addition, the NMCP skills mix needs to be improved through recruitment of qualified and experienced senior officials in key co-ordination functions, assisted by technical advisors where needed, and by middle level officers to co-ordinate and or facilitate the implementation of malaria control. Authorisation by the MoH and civil service will be required for the creation of additional posts.

Recruitment of additional staff will hopefully also allow for reallocation of responsibilities within the NMCP, so that one person is charged with external partner liaison and co-ordination.

- Raising the profile of the NMCP (USD 0)
- Recruitment of additional staff (not yet costed)

Multisectoral co-operation is needed on a number of issues, including environmental management, involving the Ministries of Health, Water, and Local Government. During the mission, the Environmental Health Section of the Department of Preventive Health Services submitted a gap

analysis of measures required for strengthening environmental control (see Annex 8). Lessons can be learned from other multi-sectoral initiatives such as HIV/AIDS.

8.5. Training and Capacity Development

An urgent activity will be to train the district Malaria Focal Persons which have been recently identified in each of the 121 districts.

- Preparation of training curriculum, training venue and facilitators, conducting the training and follow-up (USD 218,000)

8.6. Monitoring & Evaluation

The NMCP's capacity for monitoring and evaluation and for coordination of research needs to be strengthened. Key steps include the creation of a data base on malaria, recruitment of a data manager charged with coordination with research stakeholders and setting up and management of the database, training of NMCP staff on epidemiology, strengthening of sentinel districts and development and dissemination of guidelines for monitoring and evaluation, strengthening of the Monitoring and Evaluation network to facilitate flow and sharing of information. In 2005, a mid term evaluation of the MMTSP will have to be carried out.

- Creation of malaria database and training of NMCP staff in epidemiology (USD 52,000)
- Strengthening of M&E network to facilitate flow and sharing of information on malaria (at least two M&E meetings held per year with all stakeholders (USD 20,000)
- Carry out mid term evaluation of MMTSP in 2005 (USD 50,000)

8.7. Operational Research

A priority for operational research will be to analyse and interpret existing information on people's perception to malaria and health seeking behaviour. This will facilitate the design of strategies and activities to address priority areas for operational research, including:

1 Introduction of LLINs / retreatment strategies
2 Introduction of ACT - specific questions to be addressed include:
   - the effectiveness of introducing CT into malaria case management at all levels
   - the role of diagnostics in CT policy
3 Research to support an evidence based communication strategy

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- Collect, review and analyze existing data on perceptions and health seeking behaviour related to malaria control (USD 7,000)
- Carry out research on effectiveness of CT (USD 500,000)
- Evaluate role of diagnostics in anti malarial Combination Therapy guidelines (USD 20,000)

8.8. Prevention and Containment of Epidemics

In order to strengthen epidemic prevention and control, the system for early detection and containment of malaria epidemics currently in use needs to be validated. In addition, guidelines for IRS need to be developed and teams at district and community levels in epidemic-prone areas need to be trained on indoor residual spraying (IRS) as a preventive strategy.

- Validation of system for early detection and containment of malaria epidemics for three months (USD 10,000)
- Development of guidelines on IRS and capacity building of teams at district and community level on IRS application (USD 40,000)

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

#	Essential actions (additional to ongoing activities)	Products	Investments needed						Organi-sation meeting the Gap
			Human resources	Commo-dities	Equip-ment	Cost 2003 (USD)	Cost 2004 (USD)	Cost 2005 (USD)	
1.	Participatory development of communication strategy and implementation plan	Comprehensive integrated communication strategy for malaria and implementation plan in place	TA and NMCP	N/A		54,000			MCEA, UNICEF and partners
2	Strategy implementation including training, workshops, media, materials etc	Communication strategy for malaria implemented	TA				Not yet costed		UNICEF and partners
3	Preparations for next anti-malarial drug policy change	New anti-malarial drug policy in place	TA (incl. from EANMAT and EARN)				2,135,000		MCEA, UNICEF ESARO, and partners
4	Procurement of ACT drugs	ACT anti-malarial drugs available in country		ACT drugs				Not yet costed	
5	Strengthening of central TFDA laboratory through the purchase of additional equipment and ensuring its maintenance	Increased drug quality testing capacity of the central TFDA laboratory in Dar es Salaam		Mainte-nance costs	Densito-meter; computer; HPLS system		68,715	1,250	
6	Support to the TFDA Zonal Antimalarial Programme Coordinators	Zonal Antimalarial Programme Coordinators effective in each of the 8 TFDA zonal laboratories.	Zonal Programme Coordinators	Stationary, fuel & mainte-nance	Motor-bikes, computers, printers		194,480		
7	Raising the NMCP profile	NMCP profile raised and negotiation and implementation capacity increased	Advocacy and restructuring			0			MoH
8	Recruitment of additional key NMCP staff	NMCP skills mix strengthened	Additional staff						MoH and partners
9	Training of 121 district malaria focal points	Effective malaria focal points in place in each of the 121 districts	TA	Training materials, modules, guidelines	Computers, software, infra-structure	27,000	191,000		MCEA (curriculum developme nt) and partners

10	Creation of malaria data base and training of NMCP staff in epidemiology	Updated malaria data base at NMCP and staff trained in epidemiology	TA and NMCP staff				46,000	6,000	MCEA and partners
11	Re activate monitoring and evaluation network to facilitate flow and sharing of information on malaria	At least two M&E meetings held per year with all stakeholders	NMCP				10,000	10,000	MCEA and partners
12	Carry out mid term evaluation of MMTSP in 2005	MMTSP effectively evaluated and recommendations made for	NMCP, partners and CHMTs in 9 districts					50,000	MCEA and partners
13	Collect, review and analyze existing data on perceptions and health seeking behaviour related to malaria control	KAP study results available on perceptions and health seeking behaviour related to malaria control	Contract out to research institution				7,000		UNICEF
14	Carry out research on effectiveness of CT	Research results available on effectiveness of introducing CT into malaria case management at all levels	Contract out to research institution	Procure-ment of Coartem drugs			500,000		?WHO / private sector
15	Evaluate role of diagnostics in anti malarial Combination Therapy guidelines	Research results available on role of diagnostics in anti malarial Combination Therapy guidelines	Contract out to research institution				20,000		
16	Validation of system for early detection and containment of malaria epidemics for three months	Effective epidemic early warning and containment system in place	TA to NMCP and CHMTs				10,000		
17	Development of guidelines on IRS and capacity building of teams at district and community level	IRS guidelines in place, district / community staff trained in IRS	TA and NMCP staff				40,000		

Notes on abbreviations of partner names:

MCEA: Malaria Consortium East Africa
MoH: Ministry of Health
WHO: World Health Organisation

10. FOLLOW UP ACTIONS

1. Present findings of Consensus Meeting to Ministry of Health (through debriefing meeting with Deputy Minister of Health on 17 October followed by circulation of report by end of October to MoH officials),
2. Utilise different forums available for consultation on filling the gaps, including:
    - National Malaria Advisory Committee (to meet early November?)
    - EARN (East Africa RMB Network) meeting in Jinja, Uganda, (Nov. 2003) with RBM Board
3. Request assistance from RBM Eastern Africa Network and development partners in meeting the gaps

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NOTE:
At the EARN (Eastern Africa RBM Network) meeting in Jinja, Uganda, in November 2003, the NMCP of Tanzania announced that they would like for a CPA (Country Programme Adviser) to be based in Tanzania to coordinate the Roll Back Malaria campaign. They also mentioned that they felt the CPA should be a Tanzanian national

11. RECOMMENDATIONS FROM THE MISSION

The following are the general recommendations of the evaluation team presented to the NMCP and partners at the Consensus Meeting.

1 Co-ordination & Consultation:
Overall coordination and consultation should be increased between the NMCP and departments within the MoH, as well as between the NMCP and partners such as research institutions, development partners, NGOs and private sector.

2 Strategic participation:
NMCP should be included in health sector development processes and country dialogue (e.g. HSSP, PRSP, MTEF).

3 Higher visibility for malaria in Tanzania:
If malaria interventions are intensified, Tanzania could become a showcase example for malaria, as Uganda is for HIV/AIDS

12. ANNEX 1. LIST OF PERSONS AND ORGANISATIONS CONSULTED

National Malaria Control Programme team

Dr. Alex Mwita	Manager
Dr. Renatha Mandike	Deputy Manager, Epidemics / M&E
Dr. Mugungu Marero	Case Management / Malaria in Pregnancy
Dr. Fabrizio Molteni	Technical Adviser Epidemics / M&E
Dr. Azma Simba	Vector Control
Linda Nakara	Vector Control
Karin Kramer	Team Leader ITN cell
Suzan Omari	Communications & Marketing Officer, ITN cell
Ally Mnzava	Administrator, ITN cell

Ministry of Health

Dr. Hussein Ali Mwinyi	Deputy Minister
Dr. G. Mliga	Director of Human Resources Development (Acting Permanent Secretary)
Dr. Fabien Mapona	Head of Environmental Health Section, Department of Preventive Health Services (Acting Director of Preventive Services)
Dr. Catherine Sanga	Head of Reproductive and Child Health Services Section
Dr. Neema Rusibamayila	IMCI Unit
Oscar Kartaba	Department of Preventive Services
Evarist Manumbu	Director of Policy and Planning
Samuel Ngatunga	Health of HMIS Unit, Acting Director of Policy and Planning
Regina Kikuli	Budgets Officer, Policy and Planning Division
Dr. Joseph Mbatia	Head of Mental Health Section (Acting Director of Curative Health Services)
Leonard Kikuli	Acting Direcotr of Administration and Personnel
Celestine Ndebea	Acting Chief Accountant
N. Nwamwaja	CO
Patricia Mganga	PSA
Pascal Karomba	Acting Chief Internal Auditor
B. Mamuya	Acting CGC
Dr. Chande	Acting Regional Medical Officer, Arusha RHMT
Sr. Lilian Msofe	Regional Reproductive and Child Health Officer, Arusha RHMT
Irene Muhando	Public Health Nurse, Maternal Child Health, Arusha RHMT
Dr. Mukikima	DMO, Rufiji District
William Mupuga	CHMT Member, Rufiji District
Mr. Mahindeke	Clinical Officer, Bunga Dispensary, Rufiji District
Rehema Seid	MCH Nurse, Kindwiti Dispensary, Rufiji District
Mbaraka Twaha	District Health Officer, Mukuranga District
Jafari Ndande	District TB/Leprosy Officer, Mukuranga District
Vumililia Ngandango	Acting District Medical Officer, Mukuranga District
Philemon Kabugire	Clinical Officer, Mukuranga District
Sr. Anna Mponguli	Clinical Officer and In-Charge, Kisiju Health Centre, Mukuranga District

Government of Tanzania

Mwirabi Sise	Information Officer, Prime Minister's Office
Mr. Kibaha	Health Finance Officer, Ministry of Finance
Rashid Kitambulio	Planning Officer, President's Office for Regional Adminstration and Local Government

Research Institutions and Regulatory Bodies

Margareth Ndomondo Sigonda	Director General, Tanzania Food and Drugs Authority (TFDA)
Erasto Moshe	Tanzania Food and Drugs Authority (TFDA)
Mwele Malecela Lazaro	Director of Research, National Institute for Medical Research (NIMR)
Dr. Hassan Mshinda	Ifakara Health Research and Development Center (IHDRC)
Prof. Zuli Premji	Muhimbili University College of Health Science (MUCHS)
Jasper Izumba	Deputy Director, Center for Enhancement of Effective Malaria Interventions (CEEMI)
Dr. Simon Tatala	Programme Officer Anaemia, Tanzania Food and Nutrition Center (TFNC)
Patrick Kachur	Centers for Disease Control (CDC) / Ifakara Health Research and Development Center (IHRDC)
James Mwesiga	Head of Health Management Studies Department and Acting Director, Centre for Educational Development in Health Arusha (CEDHA)
Mr. Muhochi	Administrator, Centre for Educational Development in Health Arusha (CEDHA)

Bilateral / Multilateral partners

Dr. Edward Maganu	Representative, World Health Organisation
Dr. Elzeus Kahigwa	National Programme Officer Malaria, WHO
Dr. Iriya Nemes	National Programme Officer IMCI, WHO Representative, UNICEF
Dr. Suleiman Kimatta	Project Officer Nutrition, UNICEF Tanzania
Dr. Iqbal Kabir	Project Officer Nutrition, UNICEF
Arnold Buluba	Health Programme Officer, Swiss Development Cooperation (SDC)
Paul Smithson	Health Adviser, British Department for International Development (DFID)
Dr. Emmanuel Malangalila	World Bank
Dr. Mohamed Makame	Development Cooperation Ireland (DCI)
Dr. Patrick Swai	Health Programme Officer, USAID

Private for-profit agencies

Ramadhan Madabiba	CEO, Tanzania Pharmaceutical Industries (TPI); and Chairman Manufacturers Association
Maina Ngugi	Product Manager, Shelys Pharmaceuticals Limited
Jay Shah	Marketing Manager, Shelys Pharmaceuticals Limited
Antony Haji	Director, Textile Manufacturers of Tanzania Limited (TMTL)
Arjun Ramgopal	Manager, Textile Manufacturers of Tanzania Limited (TMTL)
Dinesh Haria	A-Z Textile Mills Ltd.
Sylvester Kazi	A-Z Textile Mills Ltd.

NGOs and private not-for-profit agencies

Romanus Mtung'e	Deputy ITN Director, Population Services International (PSI)
Dr. Jane Miller	ITN Director, Population Services International (PSI)
Beatrice Minja	Coordinator, Malaria NGO Secretariat
Pauline Dolan	Acting Health Sector Coordinator, Care International, Co-Chair Malaria NGO Secretariat
Peter Kasoni	Malaria Intervention Project, Care International
Zaddy Kibao	IEC Officer, Malaria Intervention Project, Care International
Virginia Woodward	Director of Marketing, World Vision Tanzania
Priskilla Gobba	Senior Programs Manager, World Vision Tanzania
Devocatus Kamara	Associate Manager, Consultancy Service Center, World Vision Tanzania
Clara Makerya	World Vision Tanzania

Sebastian Weber	Médecins Sans Frontières
Dr. Guido Falsirollo	CUAMM Italy
Dr. Joseph Komwihangiro	AMREF
Tatu Mtambalike	AFRICARE Tanzania

Other

Emmanuel Humba	Director General, NHIF (or NIHF) ???

13. ANNEX 2: agenda for the consensus meeting

An agenda for the consensus meeting was not prepared

14. ANNEX 3. DOCUMENTS CONSULTED DURING COUNTRY CONSULTATIVE MISSION

National Policies

United Republic of Tanzania (2000). The Tanzania Development Vision 2025.

United Republic of Tanzania (2001). Poverty Reduction Strategy Paper. Progress Report 2000/01.

United Republic of Tanzania, Ministry of Health (2001). Rufiji Demographic Surveillance System, Tanzania. Strategic Plan, version 2

Health Sector

Tanzania Essential Health Interventions Project (TEHIP). (1996). Project Document.

United Republic of Tanzania, Ministry of Health (1998). Workshop Report. Pre-appraisal of Health Sector Reform Programme of Work, 10-11 December 1998.

United Republic of Tanzania, Ministry of Health (1999). Health Statistics Abstract. Vol 1. Morbidity and Mortality Statistics

United Republic of Tanzania, Ministry of Health (1999). Health Statistics Abstract. Vol 2. Inventory Statistics

United Republic of Tanzania, Ministry of Health (2001). District Health Expenditure Mapping: A Budget Analysis Tool for Council Health Management Teams. Discussion Paper No. 1. October 2001.

United Republic of Tanzania, Ministry of Health (2001). Stakeholders' Consultative Meeting on the Development of a Minimum Package of Health Information, Moshi, 25-29 June 2001. Summary and Recommendations.

United Republic of Tanzania, Ministry of Health (2002). District Health Accounts Tool. Instruction Manual, October 2002.

United Republic of Tanzania, Ministry of Health (2003). District Health Accounts Tool. Handouts of the Training Computer Slideshow. A Companion to the Facilitators' Guide. Version 2, January 2003.

United Republic of Tanzania, Ministry of Health (2002). Burden of Disease Profile 2002. Graphs of selected Health and Demographic Indicators – Coastal Zone.

United Republic of Tanzania, Ministry of Health (2003). Second Health Sector Strategic Plan (HSSP). July 2003-June 2008 2

United Republic of Tanzania, Ministry of Health (2003). Second Health Sector Strategic Plan (HSSP). July 2003-June 2008. Volume II Annexes (3 copies)

United Republic of Tanzania, Ministry of Health (2003). Tanzania Joint Health Review. Main Report (3 copies)

United Republic of Tanzania, Ministry of Health (2003). Tanzania Joint Health Review. Annexes (4 copies)

Malaria

United Republic of Tanzania, Ministry of Health (2000). Roll Back Malaria in Tanzania. Phase One: Analysis at National Level.

United Republic of Tanzania, Ministry of Health (2000). National Strategic Plan for Insecticide-Treated Nets in Tanzania

United Republic of Tanzania, Ministry of Health (2002). National Malaria Medium Term Strategic Plan 2002-2007. Malaria Control Series 8 2

United Republic of Tanzania, Ministry of Health (2003). Malaria Medium Term Strategic Plan 2002-2007. Implementation and Achievements 2003 (2 copies)

Ministry of Health, National Malaria Control Programme (2003). Hati Punguzo. Tanzania National Voucher Scheme. (3 copies)

United Republic of Tanzania, Ministry of Health (2003). First National Malaria and IMCI Conference Report. Malaria and IMCI: the District Challenge. March 25-28, 2003. CCT Conference and Training Centre, Dodoma.

Malaria Consortium (2003). The profile and productivity of the National Malaria Control Programme.

LIIMCO (2003). Community Tools for Local Initiatives for Integrated Malaria Control 2

WHO-AFRO (2003). Report on the Technical Support to Strengthen RBM Monitoring and Evaluation Systems in Tanzania. Draft 1. June 2003.

Guidelines

United Republic of Tanzania, Ministry of Health (1997). Practical Guidelines on Acridine Orange Method in the Laboratory Diagnosis of Malaria and other Haemoparasites.

United Republic of Tanzania, Ministry of Health (2000). National Guidelines for Malaria Diagnosis and Treatment. Malaria Control Series 1

United Republic of Tanzania, Ministry of Health (2001). Malaria Uambukizo wa Njia ya Hewa Kuharisha Utapiamlo na Surua. Malaria Control Series 6

United Republic of Tanzania, Ministry of Health (RCHS) and JHPIEGO (2002). Focused Antenatal Care – Malaria and Syphilis during Pregnancy. Orientation Package for Service Providers.

United Republic of Tanzania, Ministry of Health (2003). Management of Uncomplicated and Severe Malaria. Prescriber's Manual. Malaria Control Series 7

Ministry of Health, National Malaria Control Programme (2003). Guidelines for Malaria Epidemic Prevention and Control in Tanzania. Draft 02

Ministry of Health, National Malaria Control Programme (2003). Reference Manual for Data Management for Malaria Monitoring and Evaluation. Malaria District Database and Malaria Epidemics Early Warning and Early Detection. Version 02.

REAPING-specific briefing documents

Malaria Consortium (2003). Desk Review for Roll Back Malaria Essential Actions Progress and Investment Gaps (REAPING) – Tanzania.

Malaria Consortium (2003). RBM Global Partnership Capacity Assessment. Working Document version 24 September 2003.

Malaria Consortium (2003). Tanzania Country Briefing. Draft version 19 September 2003.

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Other

Roll Back Malaria (2002). Achieving Impact: Roll Back Malaria in the Next Phase. Final Report of the External Evaluation, inc. annexes

Roll Back Malaria (2002). Achieving Impact: Roll Back Malaria in the Next Phase. Final Report of the External Evaluation, exc. annexes (2 copies)

TEHIP News Issue #7 (2 copies)

Gates Malaria Partnership (2003). Annual Report 2003.

15. ANNEX 4. KEY STRATEGIC DATES FOR MALARIA PLANNING AND PROGRESS REVIEW

Date	Event	Issues/Opportunities
July - August 2003	Desk Review for REAPING	Commissioned at request of the RBM Partnership Board to synthesize information on scaling-up of RBM strategies in Category I countries.
12-17 October 2003	REAPING mission to Tanzania	Mission Preparatory Committee established by NMCP but involvement of the Interagency Committee for Malaria not clear
October 2003	Public Expenditure Review	Participation of NMCP in health sector PER important as recommendations have implications for GOT budget guidelines on resource allocation to national development priorities (i.e. burden of disease issues). ***Review malaria related performance indicators – HSSP, MTEF and PRSP.
November 2003	Briefing on Malaria to Parliamentarians	Knowledge sharing on issues of concern i.e. resource allocation by burden of disease, Abuja Targets, appropriate use of IRS, case management with SP etc.
November 2003	2004/05 Budget and MTEF Guidelines	NMCP should review with view of strengthening its participation in the MOH resource allocation exercises in consultation with DPS and DPP
November 2003	EARN Annual Meeting, Jinja, Uganda	Review of country RBM progress in the East Africa sub-region and opportunities to establish inter-country collaboration in problem areas
November 2003	MOH / HMIS	Review and consensus on the minimum package of health information.
Before end 2003	National Advisory Committee on Malaria (2nd annual meeting)	Milestone requested by the Joint Health Sector Review (Note: regular meetings are needed to facilitate NMCP communications with RBM partners and scaling-up efforts)
Before end 2003	Interagency Coordination Committee for Malaria meeting	NMCP needs to assess if NMAC is sufficient to address issues of planning, monitoring, evaluation and funding linkages as per MMTSP requirements
Before end 2003	MOH Restructuring	DPS/NMCP input to MOH dialogue with Public Service Management following consultations on staffing requirements and review of job descriptions
December 2003 – March 2004	2004/05 Budget and MTEF preparations	Opportunity to secure funding of gaps identified during REAPING mission and negotiate for adequate funding for priority NMCP activities
December 2003 – April 2004	Review of Taxes and Tariffs	MOH-private sector collaboration i.e. drug and ITN manufacturers
January – December 2004	Launch of communications and Advocacy activities including campaign	Enhance and accelerate scaling-up
January – December 2004	GOT preparations for next PRSP (2005-2008)	Raise profile of malaria as a key national health, poverty reduction and development priority
March 2004	Joint Health Sector Review	NMCP presentation on achievements and constraints
March 2004	RBM Partnership Board meeting	Review of REAPING mission findings and outcomes
April 2004	Africa Malaria Day	Advocacy
June - August 2004	EARN consultative mission	Follow-up to REAPING mission
September 2004	RBM Partnership Board meeting	Update on country progress towards attainment of Abuja targets

16. ANNEX 5. REPORT OF VISITS TO DISTRICT / REGION

16.1. REPORT ON DISTRICT LEVEL VISIT - (Dr. Andrew Collins, RBM team)

The district visits took place over a one and a half day period (9th-10th October). Both districts are located in the Costal Region. Mkuranga, a very new district, is about 45 minutes driving time south of Dar Es Salaam along a good tarmac road while Rufiji lies approximately 200 kms south of Dar with a very bad road for the last 60 kms taking in total 3 and a half hours to reach. Both districts have a population of fewer than 200,000 and Rufiji has 54 health units.

Methodology

It was the intention to interview Council Health Management Teams (CHMTs) with regard to funding and planning of malaria control activities, progress with the Abuja Targets, involvement of district based partners, and support supervision from National and Regional levels and to health facilities. This was to be followed by visits to selected facilities with semi structured interviews and observations.

However, in the case of Mkuraga, the DMO was not available and I had opportunity to meet 2 members of the CHMT by chance at the health facility visited. In Rufiji, the DMO was about to leave the office for another meeting but kindly allocated 30 minutes of his time to be interviewed. Both districts felt the notice of the visit was too short (24hours). This however, had the advantage of seeing facilities performing as they normally would on a day to day basis.

Planning and funding for malaria control

The CHMT and DMO in Mkuranga were not available. A verbal report from 2 CHMT members we met at Kisiju dispensary said that they had just completed their comprehensive district plan and that malaria had been catered for. Items catered for included a revolving fund for ITNs, training in case management for clinicians and environmental control through elimination of breeding sites. He added that an element was included that focused on getting better reports on activities.

The planning in Rufiji was very comprehensive and detailed with a good analysis of the burden of disease and allocation of funding in proportion to the disease burden. The district has benefited a lot from the TEHIP project which has focused on good planning. Such an approach ensures that fund allocation can truly reflect the disease burden and naturally favour allocation to malaria control activities. This is the most desired planning approach as it is appropriately biased towards malaria. The plan also highlighted how projects can distort this process in that 2 diseases with less disease burden had a disproportionate share of funding.

Most impressive of all was the fact that this approach was shown to have an impact on childhood mortality indicators, with IMR and CMR showing reductions. MMR has not changed significantly.

The lessons of Rufiji are valuable for the rest of Tanzania (TEHIP is to be rolled out according to the last JRM) and for the rest of the region.

Support Supervision

District to health facility level
All malaria control activities depend not only on good initial training but also on strong support supervision activities. Both districts claim to have regular support supervision with each facility being visited monthly –though some of the more remote facilities receive quarterly SS visits. Schedules of SS were visible in both DHOs. Supervision is cascaded with lower level units being supervised by health centres who are facilitated by the district medical office.

However, on enquiry at the health facilities, it appears that visits last less than 30 minutes and are combined with delivery of drugs and supplies. No formal SS reports were available at the facilities to review. Rufiji district have their own support supervision checklist based on adaptation of checklists from 4 other districts.

Barriers to SS include a shortage of human resources and, in the case of Mkuranga, a shortage of vehicles with only 2 for the whole district.

National/Regional to District level
Visits from the national level were infrequent: one of the districts has not been visited since over a year.

Regional support supervision was more frequent and they were reported to be coming monthly and representatives of all districts in the region attending quarterly regional meetings. There were no reports available to review the content of these visits.

Support from Partners
Both districts have a number of health projects working in then including AMREF, Médécins du Monde, PSI and 2 research projects in Mkuranga and Ifakara, PSI and, up to recently, TEHIP in Rufiji. This assistance was reflected more in the planning and implementation in Rufiji, while Mkuranga is a relatively new district (just over 1 year).

Interventions

Overall, facilities in both districts showed that malaria control was being implemented in a comprehensive fashion. Most striking were the IEC materials on the walls of the clinic and the treatment guidelines for case management in close proximity to the prescribers. In one clinic, co bundled mosquito nets and insecticide were visible.

Case Management
Training had taken place in both districts on case management and clinicians met were able to cite the various lines of management. Rufiji district has trained most of its health workers in IMCI. Review of some treatment records verified the comprehensive training. Anti-malarials were plentiful and stock outs were reported to be very rare. Patient acceptance of SP as first line anti-malarial was reported as being good despite bad press in the initial stages of the drug policy change. Rufiji have started using Artemesinin based Combination Therapy (Artesunate and SP) as first line therapy with the support of Ifakara Research Centre. This has meant that a lot of training in case management has taken place.

There is no programme for community distribution of anti-malarials. No significant training of private drug distributors has taken place and this is a source of concern to the CHMTs.

IPT
There seems to be high levels of acceptance of IPT by pregnant women attending ANC services. SP is used for IPT. Records varied in the health centres visited. Some were reporting that 100% mothers attending received 2 doses but this was not reflected in the records were only one dose had been received and records were incomplete in another unit. Another unit reported that about 50% of mothers attending ANC got both doses. Good record keeping needs emphasis to ensure that all mothers treated are properly captured. Stocks of SP are plentiful and directly observed treatment is reported to be strictly adhered to with the onus on the mother to bring the cup and clean water.

ITNs
Availability of ITNs and retreatment kits appears to be very high either through the health centres in the form of revolving funds or in local shops through commercial marketing and private distribution. There were no schemes to target vulnerable groups with subsidized nets. In Mkuranga, AMREF are providing non targeted subsidized nets. All net prices are kept as low as possible when sold through the health units.

The main barrier cited to net use was the cost of the nets. At 3,500 Tz shillings, this could represent a few days' wages for an ordinary farmer. Net sales drop dramatically during the dry season due to the lack of biting nuisance by the mosquito. Rufiji quoted a household net coverage for the whole district of 25% from all sources of net supply.

Main Constraints

- HMIS generally weak – provision of information on successes was restricted and there was no display of HMIS information in health facilities.
- Human resources are inadequate, with delays in appointing successful candidates leading to their non arrival.
- Support supervision tends to be weak linked to human resources and transport
- Community involvement for malaria control was not very obvious.
- Cost of ITNs remains a barrier to their widespread use.

Conclusions

Overall, the impression from this small sample of health facilities and districts visited was that malaria control is high on the agenda of the districts with exemplary planning in one of the districts, a good availability of anti-malarials, ITNs, insecticide treatment kits and IEC materials at health facility level. This impression is confirmed by the NMCP report on progress included in the REAPING mission reference documents.

Districts and facilities visited	
Day 1 – Mkuranga District • Mkuranga District Health Office • Kisiju Health Centre	Day 2 - Rufiji District • Rufiji District Health Office, Utete • Kindwiti Dispensary • Bungu Dispensary

16.2. REPORT ON REGIONAL LEVEL VISIT - (Dr. Andrew Collins, RBM team, and Ms. Linda Nakara, NMCP)

Introduction

This regional level visit to the Zonal Training Centre (ZTC) and Regional Health Office (RHO) in the Northern Zone took place over a one and a half day period (14th-15th October). Both of these offices are situated in the city of Arusha. In addition to the above establishments a visit was made to the mosquito net manufacturer 'A to Z' who is in the process of commencing production of long lasting nets.

The **objectives** of the visit to the ZTC and RHO were:

1. To establish the capacity of the ZTC and RHO to offer support to Council Health Management Teams and other health workers in malaria control
2. To identify the constraints and necessary actions to allow these institutions to provide such support.

The main objective of the visit to A to Z was:

1. To look at the success of the process of transferring technology from international manufactures to this indigenous net manufacturer.

Methodology

This consisted of interviewing the top management of the offices and the factory as well as direct observation of the infrastructure and capacity of these institutions.

A. Zonal Training Centres

Introduction

There are a total of 6 such ZTCs in Tanzania. The majority are clinical in their orientation but the ZTCs of Iringa and Arusha, which have received considerable support from donors over the year, have been playing a key role in the training of CHMTs on district health planning. A recent report has identified them as having an important role in continuing medical education of all cadres of health staff[10].

A number of the ZTCs are not as well developed and in need of infrastructural development. The second Health Sector Strategic Plan (2003-2008) has identified ZTCs as being key to Human Resource Capacity building and plans to establish a full network of ZTCs by rehabilitating existing ones and adding two new centres. These centres will then offer with the aim of short term training for capacity building as well as initiating distance learning courses.

The NMCP identified the potential role of ZTCs as a solution to training of the newly appointed District level Malaria Focal Persons.

[10] MoH/HERA, March 2003 'Technical Review of Health Service Delivery at District Level'

Centre for Educational Development in Health Arusha (CEDHA)
This ZTC is a professional institute established by the Directorate of Human Resources of the MoH in 1983 with the aim of strengthening and supporting the health care system by improving the human resource capacity. CEDHA offers a long term course (Diploma in Health Personnel Education) as well as shorter courses (e.g. Health systems research, Reproductive health) all year round. The facility is well equipped with training facilities including a computer laboratory with internet access, a library and its own printing facility. It can cater for residential training with a capacity to take 80 trainees at any one time. It also uses this accommodation as a source of extra income.

The administrative and leadership of the institution appear well motivated and enthusiastic about the services they offer with a clearly articulated vision and strategy.

This institution has the capacity to provide tailored courses on updating skills of malaria focal persons on new malaria control activities. This would involve a district needs assessment and the development of an appropriate curriculum. The other institutions are not as well equipped to provide such a service without more support.

Constraints:

- Four of the six ZTCs are in need of infrastructural rehabilitation
- It is more difficult to attract higher calibre teaching staff to the more remote centres
- A curriculum needs to be developed for a short course in malaria control for district focal persons.
- Funds are needed to carry out the training

Solutions:

- Already the rehabilitation of remaining ZTCs is in the second HSSP and a number of partners have expressed interest in supporting this
- Provide incentives to attract higher calibre teaching staff and make use of human resources within the regions covered by the zone.
- Solicit for funds and technical assistance (possibly from existing successful ZTCs) to develop the curriculum and funds to implement the training

B. Regional Health Office, Arusha

A brief visit here revealed that this offices primary function is to provide supportive supervision to the districts within its region. The RHMT consists of 8 officers with a further 4 co-opted. According to the interview, only one of these officers, the Regional Health Officer would have responsibility for malaria control and RBM activities.

The office is well equipped and the logistics and transport are sufficient to allow the team to carry out quarterly visits to the districts. In doing this a locally tailored checklist is used which was not available at the time of our interview but contains a section on malaria control. The areas covered during a visit are decided upon by the districts concerned at the start of the visit.

The acting Regional Medical Officer pointed out that the team could do with an updating on its malaria control knowledge to better equip it for these support supervision visits – as the team splits up on visits and the RHO is not always a member of the visiting team.

Constraints:

- Limited specialized personnel to give support to districts for communicable diseases including malaria.
- Interruptions by central level visits affecting time for support supervision visits to districts
- Knowledge of team in need of updating on RBM and appropriate malaria control interventions and planning for malaria control

Solutions:

- Increase number of officers with communicable disease skills
- Better scheduling and coordination of visits by central level officials to ensure minimal interruption of activities at Regional Health Office
- Update knowledge of other team members on RBM and appropriate malaria control interventions.

'A to Z' Textile Mills Ltd

This factory has a 36 year history of producing net fabric and clothing. It is one of three net manufacturers in Tanzania. The factory only commenced making fully finished untreated mosquito nets from 1997 onwards, increasing its capacity from 700,000 nets in the first year to 500,000 nets per month in 2003 and switching over to nets bundled with insecticide. Recently, with the assistance of UNICEF and NETMARK they have engaged in technology transfer from the Japanese company Sumitomo to enable them to produce Long Lasting Insecticide Treated Nets. This process took longer than expected but the first nets are ready for distribution. With an initial output of 30,000 nets per month, they expect to reach 100,000 nets per month by April 2004. Net production alone gives employment to 1500 workers.

Main constraint:

Some of the biggest costs for the net production and thus the retail price include electricity. Otherwise economies of scale will reduce manufacturing cost of bundled nets and long lasting ITNs.

17. ANNEX 6. DETAILED OVERVIEW OF GAPS ANALYSES PREPARED BY THE NMCP DURING MISSION

17.1. GAP AREA Communication Strategy

PROBLEM / GAP IDENTIFIED
Lack of integrated comprehensive malaria communications strategy

SOLUTIONS PROPOSED
Development communications strategy involving all primary stakeholders

RESOURCES REQUIRED & TIME FRAME

#	Solution proposed	Investment needed						Funding available (USD)	Funding required (USD)	Organization meeting the gap
		Human resources	Commodities	Equipment	Cost 2003 (USD)	Cost 2004 (USD)	Cost 2005 (USD)			
1	Collect and collate existing data on perceptions and health-related attitudes to malaria control. Document existing materials and methodologies in use	Contract to research institution			7,000				7,000	
2.	Health Communication Technical Assistance to develop draft communication strategy and implementation plan	Technical assistance				30,000			30,000	
3.	Consensus workshop on communication strategy with full partner involvement including private sector, NGOs, CBOs, other sectors					15,000			15,000	
4.	Share strategy amongst partners and implementation plan and seek financing for financial gaps					2,000		50,000	2,000	
5.	Strategy implementation	Technical	Guidelines,			To be			To be costed	

	including training, workshops, media, materials etc	assistance	manuals, learning materials, advocacy materials etc			costed following strategy development			by March 04 following strategy development	
6	Put malaria high on the political agenda	Country champion	Media materials etc			100,000	100,000		200,000	

17.2. GAP AREA Drug Policy Change

PROBLEM / GAP IDENTIFIED
Decreasing efficacy of 1st line anti-malarial drug SP: Average failure rate between 10-15%

SOLUTIONS PROPOSED
Change to Artemesinin Combination Treatment (ACT)

RESOURCES REQUIRED & TIME FRAME

#	Solution proposed	Investments needed						Funding available	Funding Required	Organisation meeting the gap
		Human resources	Commodities	Equipment	Cost 2003 (USD)	Cost 2004 (USD)	Cost 2005 (USD)			
1.	Collect baseline information on contender ACTs	Available (EANMAT)	Test drugs	1 vehicle	(no cost for drugs, operational costs)	20,000	40,000	0	60,000	MTEF, WHO
2	Consensus Meeting to agree on the choice					20,000		0	20,000	MTEF
3	Funding for proposal development	TA (EARN)				15,000		0	15,000	Partners
4	Procurement of selected ACT	Available (MSD)	Selected CT		-	-	20 million	0	20 million	GF, GoT, Partners
5	Advocacy meetings	Available	Stationery			200,000	200,000	0	400,000	GF, GoT, Partners
6	Guidelines and other IEC materials	Available				300,000	300,000	0	600,000	GF, GoT, Partners
7	Media and communication					-	500,000	0	500,000	GF, GoT, Partners
8	Orientation of health workers						500,000	0	500,000	GF, GoT, Partners
9	Follow up supervision						20,000	0	20,000	GF, GoT, Partners

17.3. GAP AREA Raising Profile of malaria

PROBLEM / GAP IDENTIFIED

Position of the NMCP in the MOH structure is too low to be effective in its mandated functions

SOLUTIONS PROPOSED

- Restructuring of NMCP- elevation of its position within the MoH organigramme, ensure increased autonomy in terms of management, accessing resources and communication with internal MoH hierarchy and externally with partners
- Ensuring that the NMCP has the right skill mix through recruitment of additional staff

RESOURCES REQUIRED & TIME FRAME

#	Solution proposed	Investments needed						Funding available	Funding Required	Organisation meeting the gap
		Human resources	Commodities	Equipment	Cost 2003 (USD)	Cost 2004 (USD)	Cost 2005 (USD)			
1.	Elevate NMCP-UNIT									Partner Advocacy
2	Creation of New Posts- • Communications Officer • Entomologist • Data Manager • Research Scientist									MoH and partners

17.4. GAP AREA Training / Capacity Development

PROBLEM / GAP IDENTIFIED

- Uncoordinated malaria training at district and community
- The need to train 121 selected district malaria focal persons

SOLUTIONS PROPOSED

- Review the current training approach
- Develop a course for malaria focal persons and district level workers
- Identify course venues, content and duration
- Identify facilitators
- Curriculum and materials development

RESOURCES REQUIRED & TIME FRAME

#	Solution proposed	Investments needed						Funding available	Funding Required	Organisation meeting the gap
		Human resources	Commodities	Equipment	Cost 2003 (USD)	Cost 2004 (USD)	Cost 2005 (USD)			
1.	Collect and review information on approaches and curricula for district level malaria / infectious diseases workers	Commission the situation analysis (to research institution?)			7,000			0		MTEF, WHO, UNICEF,
2	Course development, planning and materials development	TA	Training materials, modules, guidelines	Computers, software, CD ROMS etc	20,000					
3	Strengthening of course venues / centres			Computers, software (CD ROMS etc.), infrastructure etc		50,000				
4	Refresher training for core facilitators to ensure uniformity and sustainability	TA								

5	Tutor and participants costs					121,000				
6	Coordination, follow up and evaluation costs					20,000				

17.5. GAP AREA Monitoring and Evaluation

PROBLEM / GAP IDENTIFIED

- Limited capacity of the Monitoring and Evaluation cell at the NMCP
- Lack of malaria database at the National Malaria Control Programme
- Lack of sufficient data at Sentinel districts to monitor trends towards the achievement of malaria key indicators
- Limited coordination with other stakeholders involved in malaria surveillance systems
- Limited capacity on M and E at district level

SOLUTIONS PROPOSED

- Create malaria database at the NMCP
- Increase coordination of stakeholders
- Recruit data manager for database creation and coordination
- Recruit epidemiologist
- Train one NMCP staff on epidemiology
- Strengthen sentinel districts
- Strengthen the Monitoring and Evaluation network to facilitate flow and sharing of information
- Carry out mid term evaluation of the NMMTSP in 2005
- Develop and disseminate guidelines for monitoring and evaluation for use in sentinel districts

RESOURCES REQUIRED & TIME FRAME

No.	Solution proposed	Investment needed						Funding available	Funding required	Organisation meeting the gap
		Human resource	Commodities	Equipment	Cost 2003	Cost 2004	Cost 2005			
1.	Create database at the NMCP	Data manager	NA	NA	6,000	6,000	6,000	6,000	12,000	
2.	Strengthen Monitoring and evaluation cell at the NMCP	Epidemiologist	NA	NA						Italian Cooperation
3.	Train NMCP staff on	NMCP staff	NA	NA	NA	40,000	NA	NIL	40,000	

	Epidemiology									
4.	Re activate monitoring and evaluation network to facilitate flow and sharing of information on malaria	At least two meetings per year with all stakeholders			10,000	10,000	10,000	10,000 from WHO	20,000	
4.	Build capacity on monitoring and evaluation at sentinel districts	Workshop with CHMTs on implementation of malaria control activities and monitoring performance				12,000	10,000		22,000	
5.	Develop and disseminate guidelines on monitoring and evaluation					7,000			7,000	
	Carry out mid term evaluation in 2005	NMCP, Partners and CHMTs in nine districts					50,000		50,000	

17.6. GAP AREA Research /KAPs for communication strategy

PROBLEM / GAP IDENTIFIED

- Limited/lack of information to facilitate development of evidence based communication strategy
- Lack of information on the effectiveness of introducing CT into malaria case management at all levels
- Role of diagnostics in CT policy

SOLUTIONS PROPOSED

- Carry out analysis and interpret existing information on peoples perception to malaria and health seeking behavior
- Pilot study on introduction of CT into the community
- Evaluate role of diagnostics in CT

RESOURCES REQUIRED & TIME FRAME

No.	Solution proposed	Investment needed						Funding available	Funding required	Organisation meeting the gap
		Human resource	Commodities	Equipment	Cost 2003	Cost 2004	Cost 2005			
1.	Collect, review and analyze existing data on perceptions and health seeking behaviour related to malaria control	Contract out to research institution				7,000			7,000	
2.	Research on effectiveness of CT	Contract out to research institution	Procurement of COARTEM drugs adequate for 100,000			500,000			500,000	?WHO / private sector
4.	Evaluate role of diagnostics in anti malarial Combination Therapy guidelines	Contract out to research institution				20,000			20,000	

17.7. GAP AREA Prevention and containment of malaria epidemics

PROBLEM / GAP IDENTIFIED

- System for Early detection and containment of malaria epidemic not validated
- Lack of clarity when and where IRS should be used
- Limited capacity of the districts on Indoor residual spraying as a preventive strategy for malaria epidemic

SOLUTIONS PROPOSED

- Validation of the system for early detection and containment of malaria epidemics
- Prepare guidelines for IRS
- For identified epidemic prone areas establish and train teams at the district and community levels on application of IRS

RESOURCES REQUIRED & TIME FRAME

No.	Solution proposed	Investment needed						Funding available	Funding required	Organisation meeting the gap
		Human resource	Commodities	Equipment	Cost 2003	Cost 2004	Cost 2005			
1.	Validation of system for early detection and containment of malaria epidemics for three months	TA to NMCP and CHMTs	NA	NA		10,000			10,000	
2.	Prepare guidelines for IRS	Staff in collaboration with partners				10,000			10,000	MTEF, WHO
3.	Capacity building on application of IRS at district level	TA and NMCP staff				30,000			30,000	MTEF
4.	Improve communication between district headquarters and Health Centers in three districts		Procurement and installation of Radio calls		10,000	10,000	10,000			MTEF, Partners

17.8. GAP AREA : Long Lasting Nets and Retreatment

PROBLEM / GAP IDENTIFIED

- Technology transfer and introduction of LLN on TZ market.
- Increasing the reteatment rate of polyester nets.

SOLUTIONS PROPOSED

- Increasing coordination between partners concerned
- Develop country specific strategies for LLN introduction and promotion

RESOURCES REQUIRED & TIME FRAME

#	Solution proposed	Investment needed						Funding available	Funding required	Organization meeting the gap
		Human resources	Commodities	Equipment	Cost2003 (USD)	Cost 2004 (USD)	Cost 2005 (USD)			
1.	Participate in LLN working group.				5,000					ITN Cell project
2.	Develop country specific strategies to promote LLN technology amongst other 2 net manufacturers								None	ITN Cell
3.	Link introduction of LLNs onto TZ market to TNVS									ITN Cell
	Assist in mobilizing funds for technology transfer if so required									ITN Cell
4.	Formulate strategies to increase retreatment								None	ITN Cell/ PSI
5.	Undertake promotion campaign				Unknown this stage					

18. ANNEX 7. ENVIRONMENTAL HEALTH ISSUES IN MOSQUITO CONTROL FOR MALARIA SUPPRESSION

Malaria control in a community can only be effected if effective measures are taken against the responsible mosquito. Most breeding sites particularly in the urban areas are man made or can at least be managed through joint community effort. The following are some of the broad issues suggested means of bringing down this menace which leads both in morbidity and mortality among the population..

S/N	ENVIRONMENTAL ISSUE	ACTIVITY	RESOURCES	RESPONSIBLE AUTHORITY
1.	Survey and Mapping	• Survey & establish Malaria Mosquito breeding sites • Mapping of all breeding sites • Map preventive measures	• Financial • Human • Material/equipment	• MOH • Ministry of Lands • Ministry of Local Govt. • NGOs • International Organisation
2.	Human Involvement	• Community involvement and participation • Advocacy • Control possible breeding sites • Maintain storm water drains, soak pits, & other waste containers. • Destroy/eliminate breeding sites through regular IEC campaigns • Plant special trees for evapotranspiration and repellents	• Financial • Human • Materials/equipment	• Ministry of Local Govt. • Ministry of Comm. Dev. • Ministry of Health • NGOs • Community Based Organisations (CBOs) • International Organisations
3.	Solid and Liquid Waste Management including small water collections	• Surface Drainage • Earth filling • Land grading • Velocity alteration • Impoundment • Proper refuse collection and disposal • Improve surface water drainage • Cleaning and clearing sites near residences • Proper and standard drainage construction	• Financial • Human • Materials/equipments	• Local Govt. Authority • Ministry of Health • Ministry of Water • Local Govt. Authority • Ministry of Health • CBOs
4.	Housing/Shelter Planning and Construction	• Improve quality of residential houses (walls,(windows, doors, eaves, etc)	• Financial • Human	• Ministry of Lands • Ministry of Local Govt.

		• Building site selection ie away from possible breeding sites. • Improve environmental sanitation ie regular emptying and drying of water containers providing covers to water containers • Houses screening • Improve workmanship	• Materials	• Ministry of Health
5.	Water Supply	• Provide piped water supply • Proper construction of wells and other water sources • Provide proper fitting covers to water reservoirs	• Financial • Human • Materials	• Ministry of Water • Ministry of Health • Ministry of Local Govt.
6.	Mosquito Control Legislation	• Establish Mosquito Control by-laws in urban and rural areas • Review existing Legislation • Enforcement	• Financial • Human • Materials	• Ministry of Health • Ministry of Local Govt. • Ministry of Justice

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