Country Updates

OCTOBER 1998 – JUNE 2000

Roll Back Malaria
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Introduction

A central principle governing the evolution of RBM at country level is that there is no “blue print”, implying that each country would chart its own, most suitable, course. This principle demands that the RBM Secretariat tracks development in each country on the basis of the course set by the country partnerships. Although the course is set by each country partnership, the developments can be expected to be in line with the goals and principles of the RBM partnership to which each country ascribes voluntarily, namely that:

- RBM is a social movement supported by many partners.
- RBM is owned by all the partners.
- Decisions are made by consensus.
- Country priorities drive RBM.
- Partners function independently, but in concert.
- Partners contribute where they have a comparative advantage, strength or interest.
- Action plans are clear, evidence-based, prioritised and adapted to local realities.
- RBM is about broadening and strengthening the capacity of health sectors to address the challenges of all diseases.

For this reason the RBM country updates are described within the following framework:

- Introduction, including the malaria situation;
- RBM action;
- Political commitment;
- Partnerships;
- Institutional arrangements;
- Strategy development; and
- Forthcoming events.

Various sources of information, including telephone interviews, e-mails and face-to-face communication with country level partners, and partner mission reports were used in this report. Synthesis and compilation was done by the RBM secretariat's partnership team at WHO, HQ.

This document describes the RBM process that countries have gone through up to June 2000. Its purpose is to provide information to the global partnership on the development of RBM at country level. The update is not an evaluation of the progress made by countries but rather describes the process that countries have undertaken.
Roll Back Malaria is a global partnership founded by the governments of malaria-afflicted countries, the World Health Organization, the UN Development Programme, the UN Children’s Fund and the World Bank. Its objective is to halve the burden of malaria for the world’s people by the year 2010 by saving lives, reducing poverty, boosting school attendance and making life better for millions of people living in poor countries, especially in Africa.

If you are interested in becoming part of the Roll Back Malaria movement, receiving the RBM newsletter and becoming part of the global success story in reducing malaria, please write to:

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Roll Back Malaria: Concepts and principles

Malaria is increasingly recognised as a serious development issue
There is evidence of a worsening global malaria situation. Malaria mortality rates in Africa are rising. The malaria parasite is increasingly becoming resistant to commonly used antimalarial drugs. New epidemics are reported—some of them in countries that have, until recently, been free of the disease. In many countries, the resources of malaria control programmes are stretched to the limit. Malaria contributes to widespread human suffering, particularly among the poorest billion people in the world. It is a major constraint to economic and social development.

The global initiative to Roll Back Malaria was launched in May 1998
It offers a great opportunity for joint action to tackle the threat of malaria for human development. It is vital that we seize this opportunity now and work for the global goal of the initiative—to halve the global malaria burden by the year 2010.

Roll Back Malaria builds on past experiences
The foundation of Roll Back Malaria is a succession of national and international initiatives which have heightened the profile of malaria as a development issue. Roll Back Malaria provides a new opportunity for thousands of malaria control personnel who have worked hard, often under very difficult circumstances, and without recognition, to tackle malaria and its consequences in recent years. It draws on the results of painstaking research in the last decade.

Roll Back Malaria belongs in a wide health sector and development context
The initiative to Roll Back Malaria will benefit from opportunities offered by the reform of health sectors so that they better tackle priority health issues. It benefits from development partnerships that are committed to seeing an absolute reduction in poverty over the next few decades. It recognises that communities are the key actors in rolling back malaria, and that national authorities—and their political leaders—are in the lead in deciding, and following through, actions to roll back malaria. It recognises the need for continued investment to develop new interventions and products for more effective action to roll back malaria.

A group of partners is taking forward the Roll Back Malaria initiative
The President of the World Bank, the Executive Director of UNICEF and the Administrator of UNDP agreed to join the WHO’s Director General in October 1998 to found the global partnership to roll back malaria. Each organisation agreed to contribute to the global goal within the context of its mandate. A broader group of partners came together in December 1998 and consolidated the Roll Back Malaria global partnership. Among the participants were governments of countries affected by the disease, other donor agencies, non-governmental organisations, international private sector representatives and research groups. Since then alliances between partners—particularly UNICEF, WHO, the World Bank and UNDP—have become strong and effective, at country, as well as headquarters levels.

WHO’s participation in the initiative involves its country, regional and headquarters staff, coordinated by a Roll Back Malaria “Cabinet Project”
A time-limited special project has been set up under the direction of the WHO’s Headquarters Cabinet to encourage a coherent WHO involvement in the partnership. A strategy and workplan for WHO’s contribution have been developed, covering the activities of groups within WHO Headquarters, regional and country offices. The preparatory phase for the cabinet project was until December 1999, the implementation phase being between 2000 and 2004.

Concepts and principles
Roll Back Malaria in Africa
The WHO Director General and the Regional Directors of WHO's African and Eastern Mediterranean regional offices have proposed the spearhead for efforts to Roll Back Malaria should be in Africa. Existing WHO initiatives for malaria control in Africa will be taken forward as Roll Back Malaria in Africa.

Critical Concepts of Roll Back Malaria

New opportunities to Roll Back Malaria
Recent applied research has demonstrated that a range of available interventions, when properly used, are highly cost-effective in reducing the malaria burden within poor communities. These include:

■ Early diagnosis and prompt and effective treatment of malarial illness, within or near the home;
■ Use of insecticide treated materials—including mosquito nets and, where needed, by environmental and other vector control measures;
■ Routine malaria prophylaxis or intermittent treatment during pregnancy;
■ Surveillance, prediction of, and rapid response to epidemics; and
■ Widespread public awareness about malaria, its consequences, and ways in which they can be avoided.

Up to now, many of these interventions have not been used to their full potential. A more intensive effort to make them widely available to all—including poor communities—would yield extra-ordinary benefits. This will involve effective partnerships between all concerned to promote better health and reduce the burden of malaria.

The six key elements of the strategy to Roll Back Malaria
The six elements of a strategy to Roll Back Malaria have received widespread support. These build on the WHO global malaria control strategy, endorsed in Amsterdam in 1992, with its emphasis on 1) effective management of malaria including malaria outbreaks; 2) rapid diagnosis and treatment of those who are ill; 3) multiple and cost-effective means of preventing infection; and 4) focussed research to develop and test, and introduce new products. It includes two additional elements: 5) a well coordinated movement through stronger capacity to health sector and community-level effort, and 6) a dynamic global partnership supported by a coalition of partners working within a common approach. These elements need to be taken forward within an enabling environment of strong in-country institutions and cross-sectoral collaboration.

The Roll Back Malaria Strategy in detail
Element 1: Effective Management

■ Information about the malaria situation, and people's needs, is used by public health authorities to design and manage responses.
■ Regions and populations at risk of malaria epidemics are identified, and responses are prepared, with the help of climate forecast and other data.
■ Families and community members are able to understand about malaria disease and take appropriate and timely action to manage it.

Element 2: Rapid Diagnosis and Treatment

■ New, rapid, easy-to-use diagnostic tests are used in situations where malaria is endemic and effective microscopy cannot be made available.
■ Pre-packaged effective drugs are accessible to parents and caretakers to enable a quick response to malaria in children.
■ Quality health care services are accessible enough for those who need professional care.
■ People with severe malaria are referred to centers offering effective case management.
■ Anti-malarial drug resistance is monitored and action taken to ensure that health workers treat patients with effective drugs (including short course combinations when relevant).
Element 3: Multiple Prevention
- People at risk of malaria infection access and use insecticide-treated mosquito nets, and other means of personal protection.
- Mosquito densities are reduced through the right mixes of environmental, biological and/or chemical methods for specific local situation.
- Mosquito resistance to insecticides is monitored to guide the choice of insecticides and strategies for their use.
- Pregnant women at high risk of malaria infection take anti-malarial medication to improve the safety of their pregnancies.

Element 4: Focussed Research
- Health sector action to roll back malaria needs to be supported by operational research to investigate problems and adapt strategies.
- Existing interventions—including care for people affected by malaria—become more effective through the application of new knowledge.
- Private industry participates in developing new, effective products that will benefit poor people.
- A new, effective and affordable medicine to treat people with malaria is developed every five years through public-private partnership.
- The development of an effective vaccine against malaria is accelerated through a coordinated international initiative.
- New, ecologically safe insecticides—that protect households without causing long-term harm—are discovered, tested and used.

Element 5: Well Coordinated Movement
- Efforts to roll back malaria are implemented in a way which contributes to sustainable and effective health care systems.
- Health systems take account of local situation when responding to the threats people face as a result of malaria.
- National health services, private practitioners and local healers work together to respond effectively to malaria and other diseases.
- Many organisations join in a synchronised effort to roll back malaria (including schools, community groups, local business, government departments and NGOs).

Element 6: Dynamic Global Partnership
- Decision-makers in governments of malaria-affected countries adopt health policies, strategies and plans that allocate sufficient financial, human and inter-sectoral resources to roll back malaria.
- Groups at the community level work actively together—as a movement for improved health and reduced malaria among people at risk.
- National and community-level actions to roll back malaria are backed by a range of partnerships in which the government, the private sector, foundations, research and academic institutions, bilateral and multi-lateral agencies, NGOs and the media, have a stake.
- Movements and partnerships are catalysed by global advocacy efforts and adapted to local realities: they are based on best available evidence.

Principles of Roll Back Malaria
- The Roll Back Malaria partnership is not a project or programme. It is a social movement that is part of broader societal action for health and human development.
- The RBM strategy builds on past experience, is evidence-based, and focuses on outcomes.
- Community and country priorities should drive actions to Roll Back Malaria.

Concepts and principles
The interests of the people, particularly people in poor communities—and especially their children and women—are at the centre of the RBM movement.

The RBM movement is supported by partners, who function independently but in concert: the partners contribute where they have a comparative advantage or interest.

The RBM movement is about building and strengthening the capacity of health services to help communities tackle all illnesses that undermine their well-being.

RBM will involve a range of sectors—such as education, agriculture and water (irrigation).

Progress of the Preparatory Phase
The preparatory phase started during July 1998 and was completed in December 1999. Some of the major achievements include:

- Launch of the Roll Back Malaria initiative jointly by the UNDP, UNICEF, the World Bank and WHO in October, 1998;
- Consolidation of the global partnership at a Global Partners Meetings held in December 1998, June 1999 and February 2000;
- Regional meetings with countries of West, East and North, Central and Southern Africa, the Mekong, Central and South Asia;
- Consensus on the RBM concept and principles among all countries in these regions; and
- The African Summit on Roll Back Malaria, held in Abuja, Nigeria in April 2000, including the signing of the Abuja Declaration and adoption of a Plan of Action.

Essential Actions of the RBM Partnership
The essential next stage is for the Roll Back Malaria partnership to be effective within malaria-affected countries. A range of actions—at global and regional levels—will support the partnerships.

1. Initiate carefully planned processes to support consensus, establish partnerships and support effective action within malaria-affected countries;

2. Ensure that country and regional offices of different partner agencies (including WHO) have the capacity to support these processes;

3. Arrange for countries receive technical support, when they want and need it, in order to help develop in-country capacity to build on successes of the past and undertake appropriate action to Roll Back Malaria;

4. Mobilise commitment and resources from the global partnership to help countries prepare their RBM strategies and to finance them as they move from conventional malaria control programmes to Roll Back Malaria;

5. Implement a global advocacy strategy for roll back malaria;

6. Implement systems to monitor progress—at country, regional and global level;

7. Further develop the global partnership at annual meetings and other events;

8. Make strategic investments in research and other initiatives to develop effective new products for diagnosis, treatment and prevention of malaria.

Helping Communities to Roll Back Malaria
Many communities are already taking action to reduce malaria-related suffering. They are helped to do this by government, community-based organisations, research groups and private enterprises.

The Roll Back Malaria movement should build on what is working well, increasing its impact so that many more people benefit. Many Heads of State have already agreed to take forward action to Roll Back Malaria: national officials are involved in an inception process. The following steps—which are not always undertaken in a clear sequence—are likely to be needed.
The Ministry of Health will usually take the lead, looking for a wide range of other groups—inside and outside government—to help. If there is a National Malaria Control Program, it will be fully involved, working with other parts of the Ministry of Health. Other government departments, such as finance, local government and education will also be involved.

All partners that are active at country level should be encouraged to become involved in the inception process from the start—in particular UNICEF, WHO, WB, UNDP bilateral development agencies, regional banks (e.g. the African Development Bank), non-governmental agencies, research groups, private entities and media groups. The headquarters personnel of many of these organisations have already agreed to work in partnership at country level. Coordinating mechanisms for their health work may already exist in-country. Where possible, country representatives of partner agencies should work through these mechanisms to ensure that each agency—whether multilateral or bilateral, public, NGO or private—contributes to RBM according to its in-country comparative advantages.

The WHO country offices have critical roles in supporting the RBM implementation process. They have the potential of effectively functioning as a catalytic hub for the RBM country level partnership. However, for this to happen, the WHO Representatives need to be adequately engaged in the process and their offices strengthened, managerially and technically. This will require in-depth needs assessment of the Country Offices with a view of developing an efficient decentralised management system in such priority areas as human resources management, budget and financial management, logistics management, amongst others. Based on the results of these assessments, the regional Offices will be better poised to provide effective support to Country Offices on technical issues, partnerships, programme implementation and management.

There is frequently scope for inter-country actions to roll back malaria, particularly when malaria transmission is intense in border areas, and other health issues are being addressed by countries working together (e.g. as in the Mekong Region and other situations).

It may be useful for partners to distinguish political, institutional and programmatic dimensions of the inception process:

- The political dimension is crucial because each country will drive its own movement to roll back malaria. This calls for building awareness, generating political support in country and encouraging commitment among key stakeholders, including donors.

- The institutional dimension is important because different levels of government (national, regional and local) each have a role; stakeholders (NGOs, media and researchers) have important parts to play, and need to be able to work together effectively; public-private partnerships will be established or revitalised; transparent systems are needed to handle decentralised action and resources use.

- The programmatic dimension starts from an appreciation of health sector and malaria control activities; it includes the planning and implementation of action to expand access to, and improve the quality of, health care delivery (including malaria activities), and defining a system to follow them up.

During the inception process, a clear statement about how different groups will work together to address these dimensions, and so help reduce the malaria burden, should be produced. This is referred to as the intention statement for action to Roll Back Malaria. The following sections outline a framework for action during the inception process.

**Programmatic Dimensions of the Inception Process**

Undertake a quick, but accurate, analysis of malaria issues within the context of wider health and development policies. The analysis should review the situation on health sector development and actions to roll back malaria. Involve people with malaria expertise in the analysis.

- Start with a clear appreciation of what is already happening—how malaria is affecting poor people, especially their women and children?

- What is the strength of the information system? Can it adequately inform decision-making about malaria and other health issues? How can malaria risk maps be developed? Is an environmental assessment available?

- Can people at risk of malaria access and implement relevant preventive measures? Can they access effective treatment promptly? What are the levels of drug resistance?

**Concepts and principles**
Are there systems for predicting and reacting to malaria epidemics? How well are they working?

How are people, civil society and government responding to the current health situation? (Consider access to and quality of health care delivery, including availability of medicines, community participation, private sector, and management issues). Is the response affected by civil disorder, conflict or natural disaster (floods, storm damage etc)?

In some cases this situation analysis may require systematic collection of relevant information. The WHO RBM project has developed guidance for situation analysis and for rolling back malaria in complex emergencies: this can be made available on request.

Look for examples of sustained success—from within the country, as well as from outside; use WHO and other agencies' experiences to help identify best practices.

Consider options for action—for doing much more—to help communities Roll Back Malaria successfully, through wider health sector action and inter-sectoral development. Define the basic health interventions needed by poor people; this will include interventions for the integrated management of childhood illness, safer pregnancy, malaria prevention and treatment, etc. Consider medium and short term plans for expanding access to, and quality of, health care, and for rolling back malaria. Identify short (2-year) and medium term (5-year) targets for action.

At the same time, identify the people (and organisations) who will be most involved in the effort to Roll Back Malaria. Include civil society and service providers outside the public sector. Engage them in the analysis and planning work; establish a consensus about what needs to be done.

Identify the resources that can be used to Roll Back Malaria—from within the country, as well as from outside, recognising that these are not just resources earmarked for malaria: they will be provided for health sector development. Find out the existing human and financial resources available for rolling back malaria within the country. Consider how they are being used. Might additional resources be available—from within or outside the country? How could they be mobilised? One way forward is to prepare an inventory of potential existing resources at country level, and ways to mobilise them more effectively. Consider the possibility of redirecting resources; consider ways in which current resources might be used more efficiently. Ensure that there are adequate skilled personnel available to use resources optimally.

Establish a broad partnership of groups who are committed to joint action; encourage government to raise malaria issues during high level dialogue with donors and representatives of UN systems agencies; and establish how partners will work together effectively. Keep the partnership under the spotlight—ensure that the heads of delegations of development partner organisations are kept informed of progress.

Produce a statement of intent for the partnership, indicating what will be achieved within five years, and milestones to be reached after two years; develop a plan for a two year period which shows how different groups will use the resources available to them to support community-level action to Roll Back Malaria, and what will be achieved with them.

Mobilise resources from partners, use them to support community-level action through health systems and efforts in other sectors, and monitor what is achieved against the milestones in the plan.

Establish and implement a system for monitoring and evaluation: define indicators and mechanisms for monitoring and evaluation during the inception process, ensure that resistance to drugs and insecticides is monitored.

**Political dimensions of the Inception Process**

Build a constituency for political support:

- engage all prominent figures (Head of State, entire government, senior political, religious and cultural figures);
- stimulate debates in the national assembly;
- encourage activities to mobilise societies around health issues and rolling back malaria at community level; and
- encourage politicians to demand information and commit themselves to getting results.
All this time, undertake high-level advocacy, with strong and accurate messages, to catalyse a national movement to Roll Back Malaria, ensuring that these messages are relevant to, and understood by, community-level groups. A strong and visible publicity campaign to launch RBM at country level may be needed early on. This will set the stage for people from all sections of the community to participate in the RBM process from the beginning. The WHO RBM project, and other partners, can help with materials—particularly with examples of what it being undertaken elsewhere.

**Institutional dimensions of the Inception Process**

National efforts to RBM should contribute to a reduced malaria burden AND benefits for the health sector as a whole. They should build on existing good malaria practice, and good practice in institutional development. A wide selection of stakeholders needs to be involved in analysis, strategy development and action so that these institutional issues can be properly examined.

Establish teams (or task forces, or committees) to take the work forward. Consider at least two teams.

- The first would be political, and involve the Head of State, government, political representatives, civil society; it would be heavily involved in advocacy work and catalysing the movement to roll back malaria.

- The second would be technical, chaired by the Minister for Health or her/his nominee, with representatives from service providers, those who generate resources, other sectors, with a remit to plan health sector development activities, oversee their implementation and monitor their results.

- A subcommittee of the technical body—the malaria control committee, including the national malaria control programme and malaria experts in the country, might be given responsibility for tracking the progress of actions to roll back malaria, and advising on any changes that may be needed.

Where possible, build on teams that already exist if they are able to take on the challenge of RBM action. They may be working on other aspects of health development (eg health sector reform, or the sector-wide approach). They may be able to prepare the national RBM effort; indeed RBM may provide an opportunity to energise these mechanisms. They may need additional capacity (in terms of time and skills) to plan and implement the inception process effectively.

Identify the people who will get RBM action rolling. A critical mass of "movers" is essential. These will be persons from within and outside government, from capital cities and local communities, and from different professional and business groups. They will be people with enough energy, skills, influence and ability to get people involved. They will maintain a focus on results. They will usually be busy people who will need to be persuaded that Roll Back Malaria is a good issue for them to take on. The "movers" should include representatives of development agencies wherever possible.

Build consensus through meetings of interested partners. The building of consensus among key stakeholders is a critical part of the inception process at country level. An important step in the inception process is a meeting of interested persons and groups at country level convened by the Ministry of Health. This is usually described as the consensus building and inception meeting. It could involve representatives of Government departments, civil society, private sector and development partners. The purpose of the meeting would be, among others, to build consensus and start establishing intentions for the national RBM effort.

**Consider the institutional issues in Roll Back Malaria**

- What contribution does the national malaria control programme make? Is it integrated within wider communicable disease and public health services? How does the national malaria programme contribute to malaria-related action within decentralised health services?

- How are programmes such as the integrated management of childhood illness, safe motherhood, programmes for displaced people contributing to a reduced malaria burden?

- What contributions do existing community development and primary health care activities make to rolling back malaria?

In each case, how effective are these contributions? What are the gaps? To what extent are they influenced—in some districts or regions—by external factors, such as civil strife and conflict?

What is the potential for intensifying the impact of these efforts given current levels of human and financial resources?

**Concepts and principles**
How could funds be made available for an increased effort in malaria control within the context of wider health sector development?

Consider how to involve a wide range of groups in Roll Back Malaria action

Involve groups beyond the public-funded national health service.

- Can private providers, traditional practitioners and NGOs do more?
- How well are research groups involved?
- Is there a place for more social marketing of preventive and treatment measures? How could it be supported?
- Is there a need to make more use of commercial channels to support RBM action?
- Are communities taking action to reduce the malaria threat within the context of other social movements for health?

Seek ways to build partnerships with groups that are ready to come on board. New kinds of incentives and contracting mechanisms may be necessary to work with these groups in enabling poor people to access the health care they need.

Consider practical ways in which the Roll Back Malaria effort can contribute to national health sector development

How could national efforts to Roll Back Malaria be designed so as to contribute to strengthening health sectors? What might this mean in practice?

- The malaria burden experienced by the people of a country is unlikely to be reduced in a significant and lasting way without a well-functioning health system. The Roll Back Malaria movement is not—in itself—taking responsibility for strengthening the health system. However RBM action should contribute to, and not undermine, this process.

- In malaria affected countries, health systems cannot be judged to be functioning well unless they have an impact on malaria. The way in which the health system tackles malaria—particularly among poor people—is a key element of the assessment of that system's overall performance

- RBM action should make a major contribution to health sector development through focusing on outcomes (enabling poor people to reduce their malaria burden) without reverting to vertically managed systems. Guidance on this issue is available from the WHO Roll Back Malaria project.

Consider the human resource capacity needs within the health sector for effective action to roll back malaria

Many countries report that they are not easily able to address Roll Back Malaria issues—particularly when the administration of health care is decentralised. The main reason for this is that they lack the people with skills, and time, to provide necessary inputs to technical and operational decisions about malaria action. Where the capacity is available, it is not always used to best effect.

In practice this may be reflected in the need for extra human capacity to ensure:

- the proper prioritisation of Roll Back Malaria outcomes within Health Sector Development efforts;
- the definition of these outcomes, and desirable actions to achieve these outcomes, within the context of the malaria situation, resources available for health sector action, reviews and evaluations of what has previously been achieved through health sector action;
- a transparent and justifiable process for the allocation of human and financial resources for the achievement of these outcomes within the context of public health, curative care, health education or related efforts within the health sector;
- reviews of the effectiveness with which these resources are used; and
- plans and actions for human resource development in relation to communicable diseases in general and roll back malaria in particular.

Capacities have to be available at national level, but also—in decentralised systems—at other levels where resources are allocated. In general, malaria expertise has tended to be located within malaria control pro-
grammes, and not made available more widely. For effective action to roll back malaria, capacity should be available where it is needed—throughout the health sector.

WHO will work with partners to explore how Roll Back Malaria action can best be incorporated within sector wide approaches to health development.

**Financial and Technical Support for the Inception Process**

WHO, through the Roll Back Malaria project, can offer limited technical and financial resources to help countries conduct productive consensus building and inception processes, and seed-corn funding for action to Roll Back Malaria. It can also offer technical support with specific actions that are critical to the success of efforts to roll back malaria, as part of the wider effort to build capacity for RBM action. This is best provided when a country-level partnership exists, and partners are able to agree on the most appropriate inputs required of different partner agencies. Hence it is desirable that all partners—under the leadership of the national authorities—are fully involved in the inception process to the best of their ability. They should do their best to work together in response both to health sector development issues—including the roll back malaria effort—and acute worsening of the malaria situation, difficulties associated with epidemics, population movements, instability and conflict, and/or climate variation.
### Acronyms used in this report

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<th>Acronym</th>
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<tr>
<td>ABN</td>
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<td>AFRO</td>
<td>WHO Regional Office for Africa</td>
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<td>AMREF</td>
<td>African Medical and Research Foundation</td>
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<td>ARI</td>
<td>Acute Respiratory Infection</td>
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<td>Control of Diarrhoeal Diseases</td>
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<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illnesses</td>
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<td>IMR</td>
<td>Infant Mortality Rate</td>
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<td>ITMs</td>
<td>Insecticide Treated Materials</td>
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<td>ITNS</td>
<td>Insecticide Treated Nets</td>
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<td>KAPB</td>
<td>Knowledge, Attitude, Practice and Beliefs</td>
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Angola

Introduction

■ About 70 percent of Angola’s healthcare facilities, along with basic water supply and sanitation services, have been destroyed by the on-going civil war. Today only 30 percent of the country’s estimated 12.9 million population has access to healthcare.

■ Malaria represents 50 percent of outpatient attendances and 20 percent of admissions. *P. falciparum* is prevalent in 92 percent of cases, *P. vivax* seven percent and *P. malariae* one percent. Malaria transmission occurs all year round, but is more intense during and after the rainy season (February to May).

RBM action

■ During 1999, major activities have included:
  - KAPB study on the willingness and ability to pay for insecticide-treated mosquito nets. A two-day meeting was organised to present the results of the study and was attended by 41 health professionals.
  - Angola participated at the regional consensus building meeting held in Maputo in April 1999 with a high-level delegation.
  - An official launch of RBM subsequently took place in Luanda province on June 25, 1999. It was supported by the Provincial Governor and organised with the assistance of national and provincial malaria control technicians.
  - In September, 1999, a team made up of malaria control technicians and led by the Provincial Health Director attended a cross-border meeting in Windhoek, Namibia. The meeting, organised by WHO and attended by Botswana, South Africa, Namibia, Zenea, Bayer and the Liverpool Tropical Institute, was held to develop mechanisms and agree on approaches for better coordination and harmonisation of malaria control strategies. It focused on case management, drug resistance, vector control, epidemic prevention and control and health facility access on the borders with respect to patient management.
  - In February 2000, Angola held a national consensus meeting on strategies to control major endemic diseases including malaria. One of the major recommendations of the meeting was to activate RBM implementation in Angola.

Political commitment

■ Commitment to RBM has been expressed at the highest political levels with the Head of State committing to the RBM partnership in writing to the Director General of WHO. The participation of a high-level delegation at the regional consensus meeting in April and the public launch of RBM by the Governor of the Province of Luanda further demonstrate the country’s commitment.

■ A high-level delegation participated at the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.

Partnerships

■ The Partners, who met in July 1999, selected Angola as one of the spotlight countries for partnership development in a complex emergency situation.

■ WHO and UNICEF are the main partners supporting the process at the moment, particularly in the area of ITNs. The private sector (diamond and oil companies) and NGOs are active in the field with small-scale projects.

■ WHO has just released funds to support therapeutic efficacy studies.

Institutional arrangements

■ RBM action is being managed within the malaria control programme. A medical officer from provincial level has been recently assigned to the National Malaria Control Programme.
**Strategy development**
- The strategy for rolling back malaria was discussed along with other major endemic diseases at a National Consensus Meeting on Strategies to Control Major Endemic Diseases in Angola, held in February 2000. One of the meeting's recommendations was to develop an emergency Plan of Action for the transition period while health sector reform is prepared.

**Forthcoming action**
- Major actions will include:
  - Preparation of guidelines for management of severe malaria;
  - Drug efficacy studies in sentinel sites;
  - Promotion of the use of ITNs; and
  - Introduction of RBM into other parts of the country.

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**Benin**

**Introduction**
- Benin, which has a population of six million, has developed a National Malaria Control Programme since 1992. The national plan was revised in 1994. In 1997, Benin was among the 21 countries to benefit from the Accelerated Implementation of Malaria Control in AFRO.
- Malaria is a major health problem in Benin. The incidence rate of malaria is 113 per thousand in the general population and 397 per thousand in children under one year old. Case fatality rate due to malaria varies from 2 to 8 percent in health care facilities.
- *P. falciparum* is widely distributed (more than 90 percent of malaria species).
- Benin has been engaged in Roll Back Malaria since the Regional Consensus Meeting.

**RBM actions**
- Medical officers have been trained in management of severe cases of malaria while health and community workers have been trained in management of simple cases. Some community health workers have been trained in bednet impregnation and many impregnation centres have been set up in the country.
- Benin has set up a Plan of Introduction for RBM. A Facilitators Group has been put in place to provide technical support to the National Programme of Malaria Control.
- Advocacy has been undertaken to enlist more partners in RBM and IEC programmes has been conducted to make everybody aware of malaria and informed on malaria control.
- A situation analysis has been conducted and is now complete.

**Political commitment**
- In 1996 a Presidential Decree instituted a national mobilisation day for malaria control which has been celebrated every year. In 1997 the National Committee for Malaria was created by another Presidential decree and in 1998 the President sent a letter to the Director General of WHO committing Benin to the RBM initiative. A budget has been allocated to the NMCP since 1996.
- The President of the Republic led a high-level delegation to the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.
- Benin took part in the Regional Consensus Building Meeting in Abidjan in March 1999.

**Partnerships**
- There has been a major commitment by partners in Benin and they are playing active roles in malaria control in all regions of the country. UN Agencies—WHO, UNICEF, UNDP and the World Bank—are
involved along with other partners from bilateral and multilateral agencies. UNICEF supports ITN promotion, the World Bank supports the development of the health sector, French Cooperation supports capacity development and USAID supports malaria control activities through IMCI. The European Union supports health infrastructure development. Belgian Cooperation and German Cooperation, through GTZ, are committed to health and malaria control activities in Benin.

- Many NGOs are involved. They include PSI, OSSD, ECHOPPE, PADS, ABN, SSP and PSP who are active mainly in community-level activities such as ITN promotion. A network of health sector NGOs has been put in place to coordinate the interventions at different levels: these include RBOS (Réseau Beninois des ONGs intervention dans la Santé)

- Government ministries, such as Education and Communication, are also involved. Nine ministries have representatives in the Facilitators Group set up to assist the NMCP.

- Local communities are also important partners in Benin.

**Institutional arrangements**

- The NMCP is assisted by two bodies: the National Malaria Committee and the Facilitators Group. A professional officer in charge of malaria is providing technical support to the NMCP.

- In Benin a foundation has been created for RBM and is committed to play a great role in the introduction and implementation of RBM strategies.

**Strategy development**

- A full situation analysis has been conducted. A workshop for setting up the strategic plan was held in June 2000.

**Forthcoming events**

- Finalisation of the national strategic plan for RBM in the country.

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**Burkina Faso**

**Introduction**

- Burkina Faso, which has a population of 10.7 million, has had a National Malaria Control Programme since 1991. In 1997 the country was among the 21 countries to benefit from the Accelerated Implementation of Malaria Control in AFRO.

- Malaria is a major health problem. It is the principal cause (39-43 percent) of consultations in health centres. Mortality due to malaria is the highest in the country and some health centres report fatality rates as high as 40 percent. Children between six months and five years and pregnant women are the most at risk.

- Malaria is the first cause of hospitalisation (19 percent of all admitted patients). Children under five account for 63.5 percent of hospitalisation cases. There are about 600,000 cases of malaria every year. Burkina Faso is located in a stable malaria transmission area. Transmission is high and seasonal.

- The principal parasite is *P. falciparum* which is found in 95 percent of cases.

- Chloroquine is the first line drug for uncomplicated malaria treatment and for chemoprophylaxis in pregnant women. *P. falciparum* resistance to chloroquine is still low.

- Burkina Faso has been engaged in RBM since the Regional Consensus Meeting.

**RBM action**

- Some activities, mainly training, have already been conducted. Training has taken place for:
  - 72 district trainers in management of severe malaria;
● 36 laboratory technicians;
● 822 health personnel in management of simple cases of malaria;
● community health workers in case management;
● 180 health care providers in case management;
● 11 persons in impregnation of materials; and
● hygiene technicians in vector control and in the impregnation of materials.

Studies have been conducted on sensitivity as well as on the utilisation of impregnated materials. Community health workers have been trained in the management of simple cases of malaria and have been provided with chloroquine. Health assistants for school children have also been trained to manage simple cases of malaria.

All malaria control activities are to be reinforced. Six songs, in national languages, have been written and recorded. IEC materials have been produced and sensitisation and information programmes have been broadcast on national TV and radio.

Burkina Faso has drawn up a plan of introduction for RBM and some activities have already taken place although others still need implementing. A Facilitators Group is already in place to provide technical support to the NCMP. Situation analysis is planned. Consultants have been recruited for desk analysis and a full situation analysis may be conducted in five districts.

**Political commitment**

- There is strong political commitment to RBM in Burkina Faso. A ministerial decree created a Steering Committee for the NMCP. Burkina Faso participated in the Regional Consensus Meeting held in Abidjan in March 1999.

- A higher level delegation participated in the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.

**Partnerships**

- WHO and UNICEF are currently the only active partners. However advocacy is under way to involve more partners. Those expected to come on board include Netherland Cooperation and Italian Cooperation. Some NGOs are already involved in RBM such as Plan International which represents NGOs in the Facilitators Group. Government ministries are also involved and take part in the Facilitators Group.

**Institutional arrangements**

- The NMCP is fitted with two structures: the Steering Committee and the Facilitators Group which hold regular meetings. The Facilitators Group is very active and is involved in advocacy for RBM across the country.

**Strategy development**

- A situation analysis, to be conducted in five districts, is planned. Consultants are already recruited and the analysis is about to begin.

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**Côte d’Ivoire**

**Introduction**

- Côte d’Ivoire, which has a population of about 16.5 million, is among the 21 countries which have benefited from the Accelerated Implementation of Malaria Control in AFRO since 1997. Stable transmission of malaria occurs all the year in Côte d’Ivoire with two peaks during the rainy season: one between April and August for the southern forest-covered part of the country, and the other between July and October for the savannah area.
Malaria affects the entire population but children under five years old and pregnant women are particularly at risk. Malaria prevalence is very high (more than 50 percent).

Proportional morbidity due to malaria varies from 16 to 20 percent and malaria case fatality rate varies from 20 to 50 percent in paediatric units and from 10 to 35 percent in internal medicine units.

In Côte d’Ivoire studies have indicated early therapeutic failure of chloroquine. The principal malaria parasite is *P. falciparum* (more than 85 percent of cases).

**RBM actions**

- The main malaria control activities in Côte d’Ivoire are training health personnel, nurses and birth attendants in the management of simple cases of malaria. This has included:
  - 215 medical officers in management of severe cases of malaria;
  - 391 health personnel in management of severe malaria;
  - 35 teachers in malaria control;
  - 269 birth attendants in management of simple cases of malaria;
  - 207 health personnel in impregnation of bed nets;
  - 26 technicians in diagnosis;
  - 548 community health workers in IEC and in management of simple cases of malaria; and
  - training other health personnel both in the public and private sectors.

- District medical staff are trained in malaria control activities.

- Many vector control activities are taking place. These mainly consist of training of health technicians and civil servants. Not all districts are involved in vector control activities although some vector control campaigns have been conducted.

- An information and surveillance system is in place. To improve efficiency health personnel are being trained to undertake surveillance activities in hospitals. Supervision and monitoring is undertaken in some districts and 49 health workers have been trained in epidemiological surveillance. More districts are becoming involved.

- Operational research is also being undertaken and more activities, such as the promotion of the use of impregnated materials, are planned to help implement malaria control activities.

- Advocacy on malaria is under way and IEC activities are being conducted. Partnerships are being reinforced at all levels.

- Côte d’Ivoire is engaged in the RBM initiative and the Regional Consensus Meeting for West Africa was held in Abidjan in March 1999. Many activities have already been implemented for the introduction of RBM. They include:
  - Advocacy campaigns have been conducted;
  - An information kit is being produced for advocacy directed toward partners;
  - Press releases have been issued;
  - Many training activities have been conducted;
  - Important activities, such as situation analysis, are planned; and
  - A plan of introduction has been elaborated

**Political commitment**

- Côte d’Ivoire hosted and participated at the Regional Consensus Meeting held in Abidjan in March 1999. The President of the Republic has chaired a national campaign for the promotion and utilisation of ITNs. Advocacy is being actively conducted to involve more partners.

- A high-level delegation participated in the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.

**Partnerships**

- There has been a major commitment by partners to RBM activities in Côte d’Ivoire. The main partners are UN agencies such as UNICEF and UNDP. The African Development Bank is involved in RBM activities in the country through its financial support. Bilateral cooperation is represented by German Cooperation through GTZ, Japanese Cooperation, French Cooperation, Belgian Cooperation, Spanish Cooperation and multilateral cooperation through the European Union.
Many NGOs are partners and are involved in RBM activities, such as ITN promotion, at community level. Civil society is committed to partnership as well as communities. Partnerships in Côte d’Ivoire are being reinforced at all levels.

**Institutional arrangements**
- A National Malaria Control Programme has been set up and is handled at the level of Executive Director.
- A Facilitators Group has been set up to assist the NMCP.
- A Technical Committee with representatives from many ministries has been created to ensure the involvement of other sectors.
- A WHO-supported National Professional Officer has been recruited for the programme.

**Strategy development**
- Strategy development is ongoing. The situation analysis, originally planned for December 1999, has been delayed but is now in progress.

**Forthcoming action**
- The official launch of RBM in October 2000.

## Democratic Republic of the Congo

### Introduction
- The Democratic Republic of the Congo shares a border of 8,165 kilometres with nine other countries in the region. In 1998, total population was estimated to be 48.7 million. The population is young—58.9 percent under 20 years and 18.7 percent under five years old. The infant mortality rate is thought to be around 148 for 1,000 live births.

- Since 1985 the country has been divided into 306 health zones of about 100,000 inhabitants in rural areas and 150,000 in urban areas. Each zone has a referral hospital and about 20 health centres.

- In 1981 the Democratic Republic of the Congo signed the African Charter for Health for All by the Year 2000. Its strategy focussed on primary health care promotion.

- Malaria is a major public health problem and constitutes the principal cause of mortality and morbidity in the country.

- Two main epidemiological zones of transmission exist. Malaria is unstable in the Highlands in the eastern part of the country where transmission is seasonal. Malaria is more stable and perennial in the rest of the country with *P. falciparum* parasite rate above 50 percent.

- *P. falciparum* is the parasite species in about 95 percent of cases.

- The whole population is exposed to malaria but children and pregnant women are the most at risk. Chloroquine is still the first line drug for treating uncomplicated malaria cases. *P. falciparum* resistance to chloroquine is of growing concern, especially in the eastern part of the country.

### RBM action
- Malaria control is a priority health action in the Democratic Republic of the Congo. In 1998 a National Malaria Control Programme was created with six divisions. Previously a malaria control project was elaborated within the five-year plan for health development (1975-1980) and implemented from 1977 to 1982. Activities implemented by the NMCP include:
Preparation of the POA 1998;
- Training 39 physicians in management of severe malaria;
- Training 240 health workers in management of severe malaria;
- Training 70 laboratory technicians in diagnosis;
- Training 440 health workers from the health centres of Kinshasa in the management of severe malaria;
- Operational research on chloroquine sensitivity and ITN utilisation; and

An inception plan was prepared following the Regional Consensus Meeting in April 1999 in Yaunde. Many activities were planned and implemented during this introduction phase. A situation analysis and a national forum for the ownership of RBM by the country were planned. Social mobilisation and resource mobilisation for the strategic plan was organised and a second forum took place for the adoption of the strategic plan for intensive development for the period 1999-2005.

Most of these activities are, however, ongoing or not yet implemented.

**Political commitment**
- Since January 1999, the Government of the Democratic Republic of the Congo has engaged the country in RBM and a high-level delegation participated in the Regional Consensus Meeting in Yaunde in April 1999.
- From April to December 1999 many advocacy activities were conducted toward bilateral and multilateral partners. High-level meetings were held to commit the Head of State to advocacy for RBM.
- Participation of a high-level delegation in the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.

**Partnerships**
- Major commitments have been made by bilateral and multilateral partners. UN Agencies such as WHO, UNICEF, WB, UNDP and UNESCO are part of the partnership. Bilateral partners are mainly USAID and DFID.
- The private sector and NGOs are also involved in malaria control.

**Institutional arrangements**
- The NMCP is a public technical service with financial and administrative autonomy. The programme is divided into operational structures: a Directoral Committee, Management Council and a Directorate. The Directorate has six divisions: technical, administrative and financial, epidemiological surveillance, ITN promotion and utilisation, IEC, case management and drug policy.
- The Directoral Committee is chaired by a representative of the Minister of Public Health. The NMCP Director and representatives of partners are members of the Directoral Committee which is in charge of following up the implementation of RBM activities.
- The programme uses provincial level structures such EPI and those of the provincial inspection for health.
- A multidisciplinary team is supporting the programme and holds regular meetings every two months.

**Strategy development**
- An RBM introduction plan has been elaborated.
- A situation analysis is planned.
- Strategy development is only beginning.
Eritrea

Introduction

- Eritrea has a population of about two million. Malaria is an important public health problem. About 75 percent of the country is malarious and 67 percent of the population is at risk. One-third of OPD visits are due to malaria. Transmission is highest during the harvest seasons.

- The number of malaria cases in 1999 was 274,000, meaning an incidence rate of 137 per thousand population. Proportional malaria morbidity is 22 percent and malaria case fatality rate about 15 percent in hospitals. *An. gambiae* is the main vector transmitting the disease.

RBM action

- Eritrea's Ministry of Health has accepted the RBM initiative and resolved to implement it across the country. A programme of work has been drawn up with the aim of establishing committees, undertaking conferences at different levels, identifying the required resources, promoting the RBM initiative, resuming main activities concerning malaria control and other actions.

- Malaria control activities have been intensified. They include:
  - Distribution of ITNs;
  - Monitoring chloroquine efficacy;
  - Residual house spraying; and
  - Source reduction through community participation.

- Major progress and activity to date includes:
  - Eritrea's MOH participated in the RBM inception meeting organised by the Regional Office WHO in Nairobi, in April 1999.
  - A five-year Plan of Action (2000-2004) has been adopted and a one-year POA for 2000 has been adopted for each zone.
  - An intensive advocacy campaign has begun using mass media in local languages.
  - Routine malaria control activities have been intensified. These include distribution of ITNs to the six zones, monitoring chloroquine efficacy, residual house spraying and source reduction through community participation.

Political commitment

- The government of Eritrea and the country's civil organisations have repeatedly shown their commitment to disease control activities in general and to the proposed integrated programme in particular. The MOH has already begun to engage line ministries and other partners to plan its implementation.

- The country attended the African Summit on Roll Back Malaria and signed the Declaration.

Partnerships

- The process of integrating activities within programmes and between programmes has also started. An intersectoral/partnership response to integrated implementation of national malaria, HIV/AIDS, STD and TB programme has been drawn up. The major line ministries and other partners have started to define and reach agreement on their roles and responsibilities in the implementation of the plan and the challenges to be addressed.

- A national malaria control multi-sectoral committee has been established. Its membership includes representatives from the Ministries of Local Government, Education, Information, Land, Water and Environment, Agriculture, Defence and Meteorology as well as national youth and women's organisations. Zonal, sub zonal and local health committees have also been formed.

- A National Malaria Conference was held in July 1999 and zonal conferences were held in six regions.

- Eritrea has also attracted financial support from the Italian Government through the Public Health and Rehabilitation Project of Eritrea (PHARPE) as well as from USAID/EHP, WHO and UNICEF. In response to Eritrea's request for technical and financial support a programme to be financed by IDA and other donors to the tune of about US$ 46 million has been prepared.

- With financial support from the Italian Government US$ 1.5 million has been made available for malaria control under the 2nd phase of PHARPE.
As well as providing technical support WHO/AFRO has allocated US$ 50,000 for malaria control in Eritrea out of the US$ 200,000 earmarked for communicable disease control. Some funds from the Extra Budget will also be allocated to Eritrea for capacity building.

**Institutional arrangements**

- The Government has established an Intersectoral Committee for Malaria. Its main role is to agree on activities and the coordination mechanism to be carried out by the different sectors to control the disease.

**Strategy development**

- The five-year (2000-2004) POA, which was finalised with inputs from all stakeholders at the national conference in July 1999, has been adopted.

- The Integrated Implementation Plan has begun by identifying the major components (Training, Health Systems strengthening, IEC, Research, Monitoring and Evaluation) and detailing the activities and tasks required. The process of integrating activities within and between programmes has also started and will be completed with inputs, budget and time-lines and the establishment of a coordination mechanism.

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**Ethiopia**

**Introduction**

- Up to 40 million of Ethiopia's 62 million population are estimated to be at risk of malaria and the problem is compounded by increasing epidemics, mixed *P. vivax* and *P. falciparum* infection, and increasing drug and insecticide resistance. Efforts to combat the disease are constrained by shortage of trained manpower, particularly of vector control supervisors at zonal level and technicians at sector and district levels in all regions, weak surveillance systems, shortage of drugs and laboratory supplies, shortage of spray pumps, and shortage of field logistics. Above all, operational finances are inadequate.

- Traditionally the malaria problem has been seen as a challenge for the health sector alone with little or no involvement by other sectors or the general community.

- Ethiopia's National Malaria Control Programme is currently in transition from a past of strong vertical programming. A 20-year HSDP is in place. The country partnership for action to Roll Back Malaria has the unique challenge of mounting a national movement within the framework of the HSDP, strong regional and warada (district) decentralisation and SWAPs.

**RBM action**

- Joint rapid consultations in 1998.

- A meeting to create a malaria control support team was held in March 1999.

- Ethiopia participated at the Regional Consensus Building Meeting held in Nairobi, Kenya in April 1999 with a high-level delegation.

- A Regional Situation Analysis was conducted in May 1999 and, at the same time, regional workshops were held to review Plans of Action and to introduce the RBM initiative at regional level.

- An advocacy campaign for national sensitisation to RBM began in August 1999. It included national TV and radio broadcasting of momentum-building interviews with social sector heads of four regional councils. TV and radio have continued to be used.

- By December 1999, Ethiopia had completed estimates and mobilisation of supplies for impending epidemics.

- A national conference on RBM was held in February 2000.

- A documentary film on malaria was produced in collaboration with the health materials production centre.

- A special logo for RBM in Ethiopia was created and banners, posters and lapel pins were produced and distributed.

**AFRO Region**
An RBM malaria support team has been formed with membership representing various partners.

**Political commitment**

- Strong political commitment has emerged and continues to grow.
- Ethiopia's Head of State has committed the country to the RBM partnership in writing to the Director General of WHO.
- The government sent a high-level delegation to the Regional Consensus Meeting held in Nairobi, Kenya in April 1999.
- The Minister of Health has been personally monitoring the development of the movement.
- A high-ranking official from the Prime Minister's office opened the National Conference on RBM in February 2000.
- The country participated in the African Summit on Roll Back Malaria in Abuja, Nigeria and signed the Declaration.
- RBM was officially launched at the conference which was attended by about 250 people including officials from all the regions, representatives of all line ministries, representatives of multilateral agencies, UN agencies, bilateral agencies, NGOs, religious institutions, members of the research community, civil society, health-related associations, universities, the OAU, ECA, community representatives, development associations, the media and the private sector (about 350 people).

**Partnerships**

- There have been major developments in country level partnerships for malaria action.
- Before RBM, the MOH's malaria control programme interacted mainly with WHO. Since the advent of RBM, joint action with MOH includes WHO, UNICEF, USAID and the World Bank working as members of the malaria support team (SMT) set up in March 1999.
- Partner representatives participated directly in the process of situation analysis and finalisation of the POA for 2000 in collaboration with each region's regional health bureau.
- The SMT coordinated the integration of regional plans into a national plan and helped present the POA for 2000 to the National Conference on RBM.
- There has been a notable increase in financial resources with new support from UNICEF of about US$ 800,000 USD for RBM and USAID of about US$ 1million. Further resources are available from UNDP and other partners.
- There is a growing formal involvement by NGOs and the private sector. Many NGOs which evolved independently over a period of time participated actively at the national conference. These included the Anti-Malaria Association and the Malaria Eradication Alumni. The Tigray experience continues to provide an entry point to community-based service.
- Dialogue has taken place with IMCI on guidelines, contribution and participation in the development of the national POA for integrated surveillance. The programme has also worked with the Health Services and Training Department to develop the Training Curriculum on basic malariaology, and collaborated with the Drug Administration and Control Department of MOH on procurement and quality control of drugs and insecticides.
- The partnership for Action to RBM is a national movement within the framework of HSDP.
- Information on meteorological factors affecting malaria transmission is obtained every two weeks from the National Meteorological Authority.
- There is a plan to produce insecticides locally in collaboration with an insecticide processing factory. Collaboration with ITN importers and distributors is taking to scale the promotion, processing and distribution of ITNs.
- There is a plan to reconcile the RBM process with the SWAPs partnership.
- Early moves are being made towards intercountry collaboration with Ethiopia's neighbours. Dialogue has been initiated on a bilateral basis with Kenya, Sudan and Djibuti.
Warada level RBM partnership building is planned.

**Institutional arrangements**
- To spearhead the inception process, a malaria control support team with key partner membership was set up in March 1999.
- A training curriculum on basic malariology has been developed.

**Strategy development**
- The country partnership has conducted a situation analysis by region and compiled a report of its findings. The POA for 2000 has been finalised and partners have worked together to identify gaps in each region’s resources. The next step is to prepare a baseline and plans for scaling up.

## Ghana

**Introduction**
- Malaria is the number one cause of morbidity in Ghana accounting for about 40 percent of all OPD attendance. It is also the leading cause of mortality in children under five years, a significant cause of adult morbidity, and the leading cause of workdays lost due to illnesses. Crude parasite rates range from 10 to 70 percent. Research work from the Kassena-Nakana district in the Upper East Region estimated that malaria accounted for over 25 percent of under-five mortalities in Northern Ghana.
- Major challenges include fragmented, uncoordinated and, in some cases antagonistic, rather than synergistic, efforts.

**RBM action**
- Malaria control action during 1999 was based on the Malaria Control Strategic Plan for 1998-2001. This included assessment of malaria control programme management in all ten regions of Ghana, establishment of a National Technical Committee on malaria, establishment of an ITM task force, which held three meetings during the year, and the training of 231 regional focal point persons in ITM.
- Other activities have included:
  - Developing a proposal for private-public partnership for the promotion of ITMs;
  - Distribution of bednets to hospitals;
  - Negotiations with the Ministry of Finance and other stakeholders to waive tax on insecticides and bednets;
  - A stakeholder seminar on environmental management for malaria control held in September, 1999;
  - Creation of sentinel sites and training in chloroquine sensitivity tests; and
  - Publishing documents on different aspects of malaria control.
- In November 1,000 bednets and 100 litres of insecticides were donated to flood victims in the northern part of Ghana. The Programme Manager and an epidemiologist participated in the malaria training course in Ethiopia.
- In January 200, an ITM task force meeting was held to discuss the implementation of the ITM project. A research agency was commissioned to start the market research on ITMs. The Ministry of Local Government, working with the Ministry of Health and private commercial partners, undertook mosquito larviciding in selected sites in the Accra metropolis.
- Ghana participated in the field testing of tools for situation analysis at country level towards the end of 1998 and a high-level delegation participated at the consultative meeting in Abidjan in March 1999.
team of local consultants was contracted to perform a desk situation analysis of malaria and its control in Ghana from colonial times to the present including all research work on the disease relevant to the country.

- A number of sensitisation and consensus building meetings were also held with various stakeholders in Accra, Kumasi and Tamale in addition to individual contacts with development partners to build partnership. Four working groups were then constituted to draft a strategic plan for the implementation of RBM in Ghana. The draft document was discussed at a National Forum of all stakeholders in November 1999. In March the country held the 2nd National Forum to review the finalised national strategy.

- A partners’ roundtable meeting for pledging has been held leading to a series of activities to engage the district level in implementation.

- Ghana has produced an advocacy package of RBM materials for national sensitisation. Direct one-to-one partner dialogue on RBM with, in some instances, participation by the RBM Secretariat has been conducted.

**Political commitment:**

- Ghana sees the principles of RBM as agreeing with the overall goals of its Vision 2020 developmental plan. They also accord with the objectives of the Medium Term Health Strategy of the MoH, i.e. increasing access, improving quality and efficiency in service delivery, and building partnerships in the context of overall sector-wide development.

- The office of the President of Ghana, through the Ministry of Health, responded positively to an invitation by the Director General of WHO to participate in the global effort to Roll Back Malaria. Ghana’s Deputy Minister of Health and Deputy Minister for the Environment co-chaired a consultative meeting on environmental management for RBM in September 1999. The Minister of Health formed an RBM coordinating committee.

- The Deputy Minister of Health gave a keynote address at the first National Forum on Strategy Development in November 1999 and chaired the ITM task force meeting held in December, 1999. On account of the strong decentralisation principle the next steps of the process are designed to bring the movement to the district health assemblies.

- The President participated in the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000 and signed the Declaration.

**Partnerships**

- The inception process has focussed on achieving stakeholder consensus at every step of the development of the RBM movement in Ghana.

- Partners participated in a National Sensitisation meeting in September in three zones of the country.

- Partners from the external community and other sectors participated directly in the drafting of the national strategy by nominating members to the four themed working groups.

- A joint initiative with the private sector and USAID is being developed to spearhead the nationwide promotion of ITMs.

- The Ministry of Local Government has been spearheading the development of the strategy for environmental management.

- The RBM Secretariat has provided funding for the inception process. DFID financed the task forces developing the draft strategy document.

- A monthly partners’ meeting on health has discussed RBM.

**Institutional arrangements**

- A national task force, headed by the Deputy Director for Disease Control, was appointed to spearhead the inception process.

- A national coordinating committee, with membership from different partners and sectors, was appointed by the Minister of Health to support the task force.

- Four working groups were then constituted to draft a strategic plan for the implementation of RBM in Ghana.
**Strategy development**

- Ghana has finalised preparation of its national strategy for rolling back malaria which has been prepared jointly with all partners, and has been subjected to national scrutiny through debates at two national forums, held in November 1999 and March 2000. The national strategy is being used for district and national level planning.

- Developing the strategy included compilation of a desk analysis by a local consultancy firm, preparation of a draft strategy by multisectoral task forces, consultations with all stakeholders and with technical experts from the RBM Secretariat.

- Plans are under way for the integration of the National Strategy into the common basket to be discussed at the SWAPs meeting in September, 2000.

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**Kenya**

**Introduction**

- Kenya has a total population of 28,679,000 (1999 census) out of which 4,864,000 are under five years old (1989 census) and 6,309,380 are women in the reproductive age group.

- Proportional malaria morbidity is 30 percent (outpatient department), out of which 19 percent are admitted. Malaria case fatality rate is around six percent in health care facilities.

- The country has an intense cycle of transmission of malaria in the lowland districts, particularly near Lake Victoria. Kenya has adopted SP as its first-line drug.

**RBM action**

- A number of RBM actions have already taken place. They include:
  - Guidelines on epidemic preparedness and response have been developed and are being implemented;
  - Training of health personnel has been conducted in epidemic prone districts;
  - Kenya has reviewed drug policy and has adopted SP as the first line drug;
  - POA for 2000 has been finalised and approved by partners;
  - Ongoing strategy development of ITN and other interventions;
  - Activities to implement a new antimalaria drug policy are in process;
  - ITNs consensus meeting held in Nairobi in July 1999 managed by AMREF;
  - Public advocacy has been identified as a key RBM strategy; and
  - Communications strategy is under development with support from DFID.

- Targeted partner advocacy has included negotiations with DFID and USAID. It has been agreed that DFID will support communication strategy while USAID will support social marketing.

**Political commitment**

- The Head of State has committed Kenya to RBM in writing to the Director General of WHO. The country hosted and participated at the Regional Consensus Building meeting held in April 1999 with a high-level delegation.

- Restructuring and enhancing the capacity of the MCU has recently taken place. Plans are under way to construct office facilities for the secretariat.

- The Minister is conducting a programme to launch RBM action in affected regions with several meetings, the first of which took place in the Coast Province in February 2000. These events are tied to the promotion of ITNs and tagged to PSI and Family Health.

- Kenya participated at the Regional Consensus Building Meeting held in Maputo, Nairobi in April 1999 with a high-level delegation.
A ministerial launch of RBM and a public campaign took place in February 2000.

The President of Kenya attended the African Summit on Roll Back Malaria and signed the Declaration.

**Partnerships**

- The National Malaria Coordinating Committee meets quarterly to receive progress reports from MCU. This allows the MOH and partners to jointly influence the management of national malaria action. Membership includes MOH (all heads of MOH departments are members of the NMCC), external partners, local NGOs and the private sector. (Meetings were held in November 1999 and February 2000.)
- A monthly partners meeting is held at which issues are discussed before being presented to the NMCC.
- NGO-supported action includes MERLIN in Kisii district, CARE in Siaya district, AMREF in Transmara district, and MSF-F in Homa Bay District.
- Partner resources include ADB Rural Health II project, ADF loan of UA 8 million operational since 1999, WHO support amounted to US$ 1,001,240. DFID support amounted to £1,660,000, UNICEF support amounted to Ksh 250,000, EU support amounts to CEU 600,000 through MERLIN.
- 1999 saw an increase in resource availability, particularly following the October partners meeting when a few projects which were stuck found ways to spend.

**Institutional arrangements**

- The NMCC is chaired by the Director of Medical Services. Multilateral, bilateral, NGOs and research institutions are members. A new manager has been appointed to the MCU to reinforce the existing manager. New office facilities are to be constructed with support from DFID.

**Strategy development**

- A statement of intent was finalised in the third quarter of 1999.
- The process of evidence gathering was already completed in 1998 with DFID support. WB rapid assessment in November 1998 added to the evidence base. Kenya prepared a detailed post-epidemic evaluation in 1999. Lessons learned included the fact that the SP preparation used was ineffective and that the regimen used by health workers—a cocktail of injectable CQ and SP—was incorrect. Other problems included uncoordinated support from partners, inability to mobilise adequate supplies of quinine, absence of functioning microscopes and a lack of staff training in microscopy and haemoglobin assessments.
- A framework for the national strategy was agreed in May 1999. Partners are currently participating directly in the process of strategy formulation.
- A 1st generation multi-partners plan 2000 was developed in November 1999 with many partners buying into it.
- Technical working groups were set up to develop strategies for case management, vector control, ITMs, epidemic preparedness, and IEC. Progress has already been made on guidelines for case management, vector control, epidemic preparedness and response. A technical working group on partnership mechanisms will be formed to prepare guidelines similar to other sections of the national strategy. It is expected that the strategy will be finalised by June 2000 and a legal framework prepared by December 2000. Key partners involved in strategy development include DFID, UNICEF, USAID and the WB.
Malì

Introduction

- Malì has a population of 9.8 million, with almost 72.7 percent living in rural areas. Malì committed itself to the global strategy approved by the International Conference of the Ministers of Health held in Amsterdam in 1992 and in 1998 was among 21 countries benefiting from the Accelerated Implementation of Malaria Control of AFRO.

- Malaria is a major health problem in Malì, one of the principal causes of morbidity and mortality and represents 33 percent of consultations.

- At national level the incidence rate of malaria is 40.9 per thousand but varies from region to region. Children under five are the most affected by malaria (63 percent of total cases).

- Malì experiences three types of malaria transmission: (1) seasonal transmission in the south of the country during six months, (2) three-month transmission in the Sahelian area and (3) irregular transmission in the northern area prone for epidemics.

- *P. falciparum* resistance to chloroquine is low.

- The principal parasite is *P. falciparum*.

- The health system is decentralised and operates through community participation. Many community health centres are run by communities themselves (Csoc). Malì has been engaged in RBM activities since the Regional Consensus Meeting.

RBM action

- The main malaria control activities in Malì are training health personnel, nurses and birth attendants in management of simple cases of malaria, training medical officers in management of simple and severe cases of malaria, training health technicians in vector control, and training community health workers in impregnation of materials. Training has already taken place for:
  - 50 medical officers in management of severe malaria;
  - 15 medical officers on the standard protocol surveillance of chemoresistance;
  - 22 laboratory technicians in diagnosis;
  - 25 health technicians in vector control;
  - 20 community health workers in the use of impregnated materials; and
  - 265 technicians in management of simple cases of malaria.

- Medical officers have also been trained in operational research. Operational research has already been conducted on chloroquine resistance and more research projects, such as ITM promotion, are planned to assist malaria control activities.

- Malì has set up a plan of introduction for RBM and many activities are already under way. They include:
  - A Technical Committee and a Facilitators Group are in place;
  - An advocacy campaign has been conducted to involve more partners at all levels in RBM;
  - Short programmes have been broadcast on national radio and TV and press releases have been issued;
  - A National Forum on Malaria has been held to build consensus;
  - Meetings have been made with multilateral and bilateral partners for advocacy to commit them to the RBM process in Malì;
  - Meetings have been made with NGOs and representatives of the private sector; and
  - A situation analysis has been conducted and a report is being written.

Political commitment

- The President of the Republic has sent a letter to the Director General of WHO to express the engagement of Malì in RBM. The President has further committed himself to take the lead in malaria control.

- Malì participated in the Regional Consensus Meeting held in Abidjan in March 1999.

- The President of the Republic led a high-level delegation at the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.
Partnerships
- An advocacy campaign has been conducted to involve partners. There is already a substantial commitment of partners to RBM activities in Mali. UN agencies such as UNICEF, UNDP, WB participated with WHO in the funding of the National Forum on Malaria, held in Mopti in April 1999. UNDP has also committed itself to fund IEC activities and UNICEF is supporting the ITM promotion. German Cooperation through GTZ is supporting malaria control activities at community level, including case management. Belgian Cooperation and Switzerland Cooperation are supporting ITM promotion in some regions.
- Government ministries are also involved. Partnership and collaboration are important issues and have been taken into account in the situation analysis. Many NGOs, such as Groupe Pivot Santé et Population and Plan International, are partners. Partners have representatives in the Facilitators Group which provides technical assistance to the NMCP.

Institutional arrangements
- The NMCP is in place and arrangements have been made to reinforce it. A multisectoral Technical Committee has been set up and a Facilitators Group has been created to provide technical support. WHO country office provides further technical support. Both groups meet regularly.

Strategy development
- The strategic plan is not yet finalised. A situation analysis has been conducted to provide baseline information.

Mauritania

Introduction
- Mauritania borders Senegal, Mali, Algeria and Western Sahara and had an estimated population of 2.5 million in 1998. Malaria control is a priority for the country. The national health policy, which was adopted in 1992, stresses primary health care and the Bamako Initiative.
- In 1997 the Ministry of Health created a unit to take charge of and manage malaria control activities and a document was produced on Policy and National Strategies for Malaria Control. It contained annual plans to implement malaria control strategies which were supported by partners such as WHO, UNICEF and GTZ.
- The malaria situation varies across the regions (waliya) of the country. Transmission is high in the waliya in the southern and eastern parts of the country and low in the northern regions prone to epidemics. The transmission season decreases from south to north.
- Various factors have contributed to the increased malaria transmission in the country such as increased rainfall in recent years, the construction of dams for irrigation, the creation of oases in the north and the low level of malaria control activities.
- In the southern and eastern waliya malaria is the first reason for consultation and hospitalisation. Between 200,000 and 300,000 malaria cases are notified every year. Between 1992 and 1995 malaria epidemics were notified by some regions and between 1990 and 1995 malaria cases grew by a factor of five to 214,478 notified cases in 1995. More than 80 percent of notified cases came from the seven waliya along the Senegal river valley.
- Malaria affects both children and adults, including 58.2 percent of children under five years old. Epidemics of fever notified from 1992 to 1995 seemed to have been malaria epidemics. Currently there is no reliable information on deaths and malaria deaths because of the weakness of the National Health Information system.
*P. falciparum* is the parasite in more than 90 percent of cases.

Operational research conducted so far in the country show that *P. falciparum* is still sensitive to chloroquine which is the first line drug treatment for uncomplicated malaria.

**RBM action**

- Like many African countries, Mauritania has put malaria control among the priority actions in its health policy. Since 1997 Mauritania has benefited from the Accelerated Implementation of Malaria Control Initiative and has already developed and implemented annual malaria control action plans in case management, vector control, chemoprophylaxis, social mobilisation, epidemic surveillance and control. Some operational research has been conducted.
- In April 1998 the NMCP was created and national policies and strategies for malaria control were adopted. The annual action plans developed have been supported by the different partners, mainly WHO, UNICEF and GTZ.
- Case management of simple malaria is conducted at all health structures of the country and severe cases are managed in some health centres. However, there is a lack of trained health personnel, of required conditions like drugs, laboratory facilities for the management of severe cases of malaria.
- RBM activities to date include:
  - Training 791 health workers in management of simple cases of malaria;
  - Training 845 community health workers in management of simple cases of malaria at community level;
  - Training 50 laboratory technicians in diagnostic; and
  - Training 387 health workers in impregnation of materials.
- To achieve a more effective malaria control strategy Mauritania has been engaged in the RBM initiative since January 1999. A plan of introduction has been drawn up for RBM in 2000 and a Plan of Action for 2000-2002. However, once situation analysis is completed in August 2000 a strategic five-year plan will be set up instead of the current three-year plan.

**Political commitment**

- The Government of Mauritania has been engaged in RBM activities since January 1999 and a high-level delegation participated in the Regional Consensus Meeting held in Abidjan in March 1999.
- From April to September 1999 many advocacy meetings were held in the country targeting the main active and potential partners.
- In July, 1999 a sub-regional meeting between Mauritania and Senegal was held in Rosso to sensitise the two Ministers of Health of the two countries to RBM.

**Partnerships**

- There is a substantial commitment of partners to RBM activities in Mauritania. The main partners are UN agencies such as UNICEF which supports some regions in the implementation and the follow-up of primary health care activities, mainly at community level and in the promotion of ITNs.
- German Cooperation through GTZ is supporting integration of malaria control activities into primary health care in one region. Spanish Cooperation is providing special support in integration of malaria and Guinea worm control.
- Some NGOs are involved in the promotion of malaria control activities at community level. These include PSF (Pharmaciens Sans Frontière), GPHF (German Health Fund).
- Some partners are being targeted to become involved in the implementation of RBM in the country. They include the European Union, UNDP, UNFPA, French Cooperation, Japanese Cooperation, Canadian Cooperation and USAID and PSI as well as civil society.

**Institutional arrangements**

- As well as the NMCP, which has been fitted with a technical central unit from the service of communicable diseases of the Direction of Health Protection, there is a National Committee of Coordination of Malaria Control chaired by the Director General of Health Protection. This committee includes representatives
from the Ministry of Health and Social Affairs, the different UN agencies in the country, bilateral cooperation and NGOs.

- In July 1999, a special group was set up for RBM within this committee.

**Strategy development**

- The process is already on-going and a POA 2000 with an RBM component has been elaborated.
- Consultant training in situation analysis, initially planned for April 2000, has been postponed to August.

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**Mozambique**

**Introduction**

- Mozambique's population is about 15 million according to a 1997 census. Malaria is highly endemic in almost nine out of 10 provinces in the country and up to 90 percent of the population is at risk. About 250,000 people were displaced in the major floods which hit Mozambique in early 2000.

- The poor coverage of health services (currently estimated at 40 percent) is the major challenge. The level of *P. falciparum* resistance to chloroquine is seriously increasing. Recent documented studies estimated the resistance level around 30-40 percent in sentinel sites situated in the most populated urban areas.

- Preventive intervention, principally indoor spraying with residual insecticides, covers about 10 percent of the highly vulnerable population around major city centres. A case management programme has been introduced at hospitals and reduced case fatality rates on average by 2-4 percent.

- The country is weak in health information systems and therefore weak in monitoring epidemics.

**RBM action**

- Mozambique is a member of the three-country initiative with South Africa and Swaziland formed to deal with cross-border problems in the Lumbombo development area of southern Mozambique. The major intervention in this area is indoor residual spraying.

- The country's National Malaria Control Programme conducts an annual indoor spraying programme in almost all of the major cities, basically in the periphery, which is mostly low-lying land with concentrations of poor quality housing. The NMCP covers about 1.5-2 million people living in the area with one round of pyrethroid spraying between November and January at the onset of the rainy season.

- ITNs have been distributed in selected districts of at least two other provinces in collaboration with UNICEF. UNICEF and the MOH will gradually increase the bednet programme over the next 3-5 years.

- Doctors, nurses and other personnel providing healthcare are being trained in disease management to ensure better case management. Epidemic response, including treatment and multiple vector interventions, is limited to cities and suburbs.

- Mozambique participated in and hosted many RBM-related activities during 1999. These included participation at the Southern Africa 1999 Malaria Planning and Consultation Meeting in Harare, Zimbabwe; a rapid malaria assessment mission sponsored by the World Bank; a visit by the RBM Programme Manager in March 1999 and a visit by the Director General of WHO in April 1999; hosting a consensus building meeting (Southern Africa): a joint mission by the World Bank and WHO on sector-wide approaches to malaria control; a meeting on health sector reform sponsored by the World Bank, a meeting with the Ministries of Education and Agriculture on the introduction of malaria prevention in agriculture extension; and education programmes.
**Political commitment**

- Political commitment is strong. Mozambique participated in and hosted the Regional Consensus Meeting for Southern Africa. The Minister of Health officially opened the regional inception meeting. A high-level delegation, led by DMS, participated at the regional consensus meeting. The country has hosted the Director General of WHO. An exhibition on malaria was held during the visit of Queen Elizabeth II of Britain. Several TV and radio programmes about malaria have been broadcast.

- Mozambique's Prime Minister and Minister of Health attended the African Summit on Roll Back Malaria held in Abuja, Nigeria in April and the country signed the Declaration

**Partnerships**

- Mozambique has adopted the integrated disease control approach and SWAPS mechanism for managing partner support. A partnership is evolving that involves a strong alliance between UNICEF, WHO the World Bank and UNESCO.

- A framework document for a school malaria education and control programme has been discussed among these partners and the MOH. UNICEF and WHO have agreed to formally merge their plans for malaria action as a step towards promoting the concept of partners buying into one agreed plan of work. The MOH has allocated space to the joint UNICEF/WHO support team, of two WHO and one UNICEF consultant, which is be set up. The team of three will work as MOH staff and will begin by merging the WHO and UNICEF plans. USAID has been invited to join the alliance and there is growing support from the private sector.

- Mozambique is a participant in the alliance with South Africa and Swaziland to control malaria in order to promote tourism and development in the Limbombo area. Along with traditional partners, new partners have become active in supporting the RBM effort including bilateral agencies such as NORAD, DANIDA and SWISS and Italian Cooperation.

- There has been an observed increase in resources available to the malaria effort. Several donors have already committed substantial funds and materials for malaria control specifically in the context of the present emergency malaria prevention plan after flooding. UNICEF and the African Development Bank have already jointly pledged US$ 1.3million, while more funds, amounting to around US$ 2million, are being mobilised from UNICEF and USAID. Several other NGOs, including Oxfam, Concern and Amref, have already contributed by the purchase of substantial numbers of bednets. Mozal, a private aluminum processing company in the Maputo suburbs, has pledged around US$ 500,000 through the LSDI malaria control project.

**Institutional arrangements**

- A technical committee was created to spearhead implementation of the POA. Members include WHO, USAID, UNICEF, the World Bank and the MOH. By December 1999, the Technical Committee had adopted the POA drawn up by the MOH as the guiding baseline document for strategic intervention by RBM.

- The RBM process is managed within the existing malaria control program. UNICEF and WHO have recruited three technical personnel to be seconded to the MOH. Funds have been mobilised to assist MOH provide a secretariat to the team. However, by the close of 1990, capacity at headquarters was still felt to be low in terms of logistical, communication and information processing abilities. UNICEF and WHO are now supporting the country to set up a secretariat.

**Strategy development**

- The country partnership decided to integrate RBM action into the malaria control plan for the period July 1999 to July 2000. About 40 percent of the necessary resources for the POA have been raised.

- Situation analysis at district levels will be completed in the last half of 2000 and will be followed by a country strategic plan for RBM.
Niger

**Introduction**

- Niger has a population of around 10 million and has had a National Malaria Control Programme since 1985. In 1994 the country adopted a declaration of national policy in malaria control. In 1997 Niger was among the 21 countries which benefited from the Accelerated Implementation of Malaria Control Initiative of AFRO.

- Malaria is a major health problem in Niger. A serious epidemic was notified in 1998 in the northern part of the country. More than 850,000 cases of malaria are notified every year equally distributed in children and adults. Mortality rates are higher in children under five years old. The principal parasite is *P. falciparum*.

- Niger has been engaged in RBM activities since the Regional Consensus Meeting.

**RBM action**

- The main malaria control activities in Niger are training health personnel in case management and training health technicians in sensitivity testing. Trainers at national and regional levels have been trained in management of severe cases of malaria. ITM promotional activities have also been conducted. Impregnation centres have been set up and are becoming more and more active and effective.

- IEC materials have been prepared to enable home management of simple cases of malaria, mainly for the remote regions of the country. Advocacy has been conducted to involve more partners in malaria control in Niger.

- A plan of introduction of RBM has been drawn up and some of its activities have already taken place. A Facilitators Group has been in place since July 1999 to assist the NMCP.

- Sensitisation and information actions have been undertaken through national radio and TV and a week of social mobilisation for malaria control has been organised. Meetings have been held with multilateral and bilateral partners as well as with NGOs and associations.

**Political commitment**

- A high-level of political commitment has been made to the RBM initiative. It has been decided to reinforce the position of the NCMP by connecting it directly to the Secretariat of the Ministry of Health. Niger participated in the Regional Consensus Meeting held in Abidjan in March 1999.

- A high-level delegation participated in the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.

**Partnerships**

- An advocacy campaign has been conducted to gain the commitment of partners. The main partners are WHO, UNICEF, UNDP and the World Bank. Government ministries are also involved. There is an ongoing effort to enlist bi-lateral and multi-lateral cooperation. UNICEF supports activities in social mobilisation and ITM promotional activities. The World Bank is involved in the reinforcement of the health sector and UNDP supports prevention activities at the community level.

**Institutional arrangements**

- The NMCP is getting technical assistance from two bodies—the Steering Committee and the Facilitators Group. Another inter-agency committee has been formed to follow-up implementation of RBM activities.

**Strategy development**

- Strategy development is under way. A desk analysis has been completed.

**Forthcoming action**

- An official launch of RBM is planned for the second half of 2000.
Nigeria

Introduction

- Nigeria had a population of 121.3 million in 1998. The GNP per capita is US$ 300. The annual growth in GDP for the period 1999-2003 is expected to be 2.1 percent and the growth in the GNP per capita to be -1.6 percent.

- Malaria is endemic throughout the country with more than 90 percent of the population living in areas with stable malaria. Malaria is responsible for 25 percent of infant mortality and 30 percent of childhood mortality.

RBM action

- In 1998 Nigeria helped pre-test situation analysis instruments for RBM. The country participated at the Regional Consensus Building Meeting held in Abidjan in March 1999 with a high-level delegation and is now in the process of implementing its inception plan developed following the Regional Consensus Building Meeting. This inception process includes maintaining the momentum of implementation for on-going malaria control activities and the building of partnerships and reviewing of strategy for RBM. Some of the major activities are:
  - Commissioning a team to compile a desk analysis of malaria information as a first step to a full malaria situation analysis;
  - A national consensus meeting on RBM held in March 2000;
  - Training health workers in the management of severe malaria cases;
  - Training health workers in the promotion of bednets; and
  - Advocacy for community leaders and women’s groups on community-based malaria control using IEC materials.

Political commitment

- Political commitment continues to be demonstrated by the highest political offices.
  - The Head of State has committed Nigeria to active membership in RBM in writing to the Director General of WHO;
  - Nigeria participated at the Regional Consensus Building Meeting held in Abidjan in March 1999 with a high-level delegation;
  - The country was represented by the Minister of Health at the 2nd RBM Consulting Meeting in Geneva in February 2000;
  - The Minister of Health personally officiated at the National Consensus Meeting for RBM; and
  - Nigeria’s Head of State has convened and cofinanced the African Summit on Roll Back Malaria for heads of state and government held in Abuja, Nigeria on April 24 and 25, 2000. The Head of State hosted the Summit and signed the Abuja Declaration.

Partnerships

- The partnership has been broadened to include the private sector, NGOs and international development agencies in the central coordination mechanisms.

- A meeting was held with the private sector in April and other partners in July 2000.

Institutional arrangements

- With the support of WHO, three national professional officers have been recruited to further strengthen the capacity for spearheading RBM action in various states.

Strategy development

- The work on the desk situation analysis was completed and presented to the National Consensus Meeting in March 2000.

- Next steps will include performing field assessments in about five districts and continuation of national consensus building through six zonal meetings over the period September–October 2000.
Sao Tome & Principe

Introduction

- The country consists of two mountainous islands—São Tomé, the capital, and Principe—150km apart. The mountains rise to 2,000 metres. There are six districts and one autonomous region (Principe island). Total population was estimated to be 137,500 in 1999. Of these, 60 percent live up to 10 km far from the capital city and 96 percent of the population live in the coastal zone. IMR is 67,6 per 1000. GDP is US$317 (1995). The government health budget is US$ 4.5 per inhabitant (1995) and the health facility:population ratio is 1:15, 577 in São Tome and 1:1,208 in Principe.

- Malaria occurs all year round, hyperendemic in São Tomé and mesoendemic in Principe. *An. gambiae* is is the major vector. *P. falciparum* is present in 80 percent of cases, although *P. vivax, ovale* and *malariae* are also present.

- Between 60 and 75 percent of admissions are due to malaria. The incidence rate of malaria in the general population was 708 cases per 1,000 in 1992 and 553 per 1,000 in 1997. The proportional mortality rate due to malaria at health facilities is 81 percent in under-fives (1997).

- In urban areas, and based on KAP8 studies carried out in 1997, each child under five experiences on average nine episodes of fever a year, compared with 13 episodes in 1995. Malaria case fatality rate in under-fives admitted was 2.3 percent in 1998. Resistance of *P. falciparum* to chloroquine is estimated to be between 15 and 25 percent.

RBM action

- Sao Tome & Principe is implementing a biennium Plan of Action for 1999–2000, developed after the consensus building meeting in Maputo. This POA was reviewed with AFRO support in December 1999. Funds totalling US$ 23,500 were made available in November 1999 for inception activities. A health sector reform process is going on, with support mainly from WHO. A National Health Policy has been developed and is waiting for government clearance. A National Health Development Plan is being prepared.

- Major planned interventions include improvement of technical and managerial capability of the NMCP, case management, promotion of ITNs, supervision, monitoring and evaluation, establishment of coordination mechanisms for RBM and development of RBM Strategic Plan for the next five years. Total cost of the POA is US$ 187,131.

- Sao Tome & Principe participated at the Regional Consensus Building Meeting held in Maputo in April 1999 with a high-level delegation. A team from RBM/AFRO secretariat in December 1999 helped prepare the RBM inception plan. More than 50 people attended an inception meeting in December 1999. A media meeting was organised in February 2000.

- A Facilitators Committee for the inception process of RBM was created in February 2000 and in March a health officer from UNICEF held a briefing meeting with the Minister of Health on the Abuja Summit. Documents for the Summit related to objectives and expected outcomes have been delivered by UNICEF to the MOH for the Heads of State briefing. Terms of reference for situation analysis have been developed.

Political commitment:

- Evidence of political commitment includes;
  - Direct commitment of the country to the partnership by Prime Minister in writing to the Director General of WHO;
  - Participation with a high-level delegation at the Regional Consensus Meeting in April, Maputo;
  - Statement of intent sent to AFRO after the consensus building meeting by the MOH (NMCP), and
  - A high-level delegation participated in the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.

Partnerships

- A mid-term review of the UNICEF/MOH programme was carried out in July 1999. Malaria activities were included in the new programme which began in January 2000. ADB has prepared a project of US$
4.7million to support environmental, water and sanitation projects as well as malaria control, following a review of the programme undertaken in 1998, with technical support of a malaria consultant from WHO.

- Dialogue between UNICEF, ADB and various NGOs on RBM began in December 1999. Further development of the partnership has included the participation of UNICEF and NGO members at the briefing of consultants on the RBM inception and implementation process, organised in Sao Tome in February 1999. UNICEF and UNDP representatives were present during the opening ceremony.

**Institutional arrangements:**

- In addition to the work being done by the malaria control programme personnel, a facilitators' committee was created in February 2000 to spearhead and facilitate the RBM process. Eight Sao tomeans, (one from WHO, one from UNICEF; two from NGOs and four from the MOH) have been trained as potential consultants to support the inception process and RBM implementation activities at country level.

**Strategy development:**

- The country plans to carry out a detailed situation analysis to allow an evidence-based review and the development of a national strategy. The situation analysis is scheduled as follows: training of facilitators, desk analysis, a first stakeholders meeting, situation analysis at district level, a second stakeholders meeting and strategy development.

**Forthcoming action**

- The following activities are planned for the next six months:
  - Situation analysis, strategy development and launching RBM no later than June;
  - Training health personnel in case management, distribution of guidelines for case management, promotion of ITNs;
  - Community-based activities with mothers and health workers; and
  - KAPB study on chemioprophylaxis among pregnant women, antimalarial drug efficacy tests and social mobilisation.

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**Senegal**

**Introduction**

- Senegal has a population of 9.5 million of whom 60 percent live in rural areas. The country has been active in malaria control since 1992 following the Ministers of Health Conference in Amsterdam.

- Malaria is the first cause of mortality and morbidity in Senegal and in each region the first disease affecting the population. Since 1993 it has been the principal cause of mortality and morbidity (35 percent of cases). In 1996, 600,000 cases of malaria were notified in the health centres with 5,000 deaths. Severe cases of malaria are on the increase and both adult and child deaths are rising. Lethality rates vary and reach 50 percent in some health centres.

- In Senegal the transmission of malaria is seasonal—the rainy season and the beginning of the dry season—and the duration of the period of transmission is shorter in the south than the north of the country.

- The principal parasite is *P. falciparum* which accounts for more than 90 percent of cases.

- Malaria control is considered an essential factor for development in Senegal. In 1995 a National Malaria Control Programme was established and in 1997 Senegal was among the 21 countries which benefited from the Accelerated Implementation of Malaria Control Initiative of AFRO.

- Senegal has been engaged in RBM since the Regional Consensus Meeting. A workshop was held in June 1999 to raise awareness of RBM.
RBM action

- The main malaria control activities in Senegal are training health personnel, nurses and birth attendants in management of simple cases of malaria, training medical officers in management of simple and severe cases of malaria and in operational research, training health technicians in vector control, and training community health workers in the impregnation of materials. To support IEC activities teachers have been trained and many press releases on malaria control have been issued. Training has included:
  - 22 medical officers, as well as 25 supervisors and 28 health personnel, in education for health;
  - 168 health workers in case management;
  - 29 birth attendants, and 78 hospital health workers, in case management;
  - 14 laboratory technicians in diagnosis;
  - 73 health workers in hygiene;
  - 1,041 community health workers in case management; and
  - 3,567 community health promoters in IEC.

- Sensitisation is being accomplished through public service announcements on national TV and radio and on private radio. Press releases have been issued to support advocacy.

- Operational research has been conducted on chloroquine resistance and on the marketing and use of ITNs.

Political commitment

- The President of the Republic has sent a letter to the Director General of WHO to express the commitment of the country to the RBM initiative. Senegal participated in the Regional Consensus Meeting held in Abidjan in March 1999.

- The Minister of Health led a high-level delegation to the African Summit on Roll Back Malaria in Abuja, Nigeria in April 2000.

Partnerships

- There is a substantial commitment of partners to RBM activities in Senegal and advocacy campaigns have been conducted to encourage their involvement.

- UN agencies such as UNICEF, UNDP, UNPF and the World Bank are partners. The World Bank is helping finance a major health programme which includes malaria control. UNICEF, UNDP, NGOs and the private sector are involved in the promotion of impregnated materials. UNDP is financing the promotion of impregnated materials. UNICEF is supporting case management at community level by supporting the training of community health workers. Japan Cooperation, through JICA, is contributing to health programmes, malaria control activities, financing and building health structures.

- Many other NGOs are involved at the community level. World Vision, La Foundation Solidarité Partage, Plan International, Mission Lutherienne and CACAH Communities are playing a major role as partners and support the implementation of malaria control activities through community support networks in some districts.

- Ministries are also involved and take part in the Facilitators Group.

Institutional arrangements

- A multidisciplinary Steering Committee has been created to assist the NMCP. It has a consultative role and includes representatives from 16 Ministries as well as representatives from the University Cheikh Anta Diop, the Pasteur Institute, the Institute of Health and Development, the Senegalese Agricultural Research Institute and the Ecole Inter-Etat des Sciences et médecine vétérinaires.

- A Facilitators Group has been created to provide technical assistance to the NMCP and the group holds regular meetings. The NMCP is also benefiting from the technical support of a professional officer in charge of malaria at WHO country office.

Strategy development

- Technical meetings have been held to sensitize and advocate RBM in Senegal. As a result of these meetings it has been decided to conduct a situation analysis for an evidence-based strategy development. This is under way but not yet complete.
**Forthcoming events**
- A National Consensus Meeting on RBM strategy is planned for September 2000.

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**United Republic of Tanzania**

**Introduction**
- UR Tanzania has a population of 29.3 million (1988 census) which is growing at a rate of 2.8 percent. It is estimated that in 1997, the high-risk groups consisted of five million children under five years of age and 6.7 million women of child-bearing age (15–49).
- Malaria is highly endemic in most parts of UR Tanzania with few malaria-free areas. The level of endemicity varies greatly, ranging from unstable seasonal malaria (epidemic prone areas), to stable seasonal and perennial malaria.
- Recorded outpatient attendance from the Health Management Information System (HMIS) of the MoH in 1997 was 3.2 million cases in all age groups out of which 36.1 percent were cases due to malaria. However this is a conservative figure, as at 13.2 percent the health facility response rate in the country is very low and over 50 percent of cases are treated at home without reporting to any health facility.
- Currently malaria is the top disease priority averaging about 35 percent of all inpatient diagnoses and about 40 percent of all outpatient diagnoses in all age groups.

**RBM action**
- RBM is building on the foundation of the strategies laid down in UR Tanzania during the accelerated malaria control programme.
  - The Acroidine Orange test for malaria diagnoses is now in use in most of the country’s district hospitals;
  - A major evaluation of malaria control activities was carried out in 13 districts (three epidemic prone districts and 10 holoendemic districts) in March 2000. The evaluation included facility-based evaluation and community assessment of treatment seeking behaviour and use of ITNs. The data is now being analysed;
  - In March 2000, 42 stakeholders, representing the private sector, the public sector, bilateral and multilateral partners, the research community and NGOs met to commence a process of developing and funding a national strategy and plan of action for taking ITN implementation to national scale;
  - In the second week of March, antimalarial drug efficacy studies began in Zanzibar (Unguja and Pemba islands);
  - Training of prescribers in proper case management of uncomplicated and severe malaria has been undertaken in 29 districts. Nurses have been trained in the care of severe malaria patients;
  - UR Tanzania participated at the regional consensus building meeting held in Nairobi April 1999 with a high-level delegation; and
  - In May 1999, following the regional consensus meeting, the country partnership organised the first stakeholders meeting. At this meeting partners resolved to implement RBM within the context of the ongoing movement towards SWAPs.

**Political commitment**
- The Head of State committed Tanzania to RBM in writing to the Director General of WHO in January 1999.
- In October 1999 the Prime Minister officially opened the international conference on the network on ITNs.
- The Regional Medical Officers Conference for 1999 adopted RBM as the conference theme and made a firm commitment to RBM at regional and district levels.

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**AFRO Region**
The Honourable Minister of Finance, Iddi Simba, made a statement at the World Trade Conference last year that UR Tanzania had removed taxes and tariffs on bednets and netting material to make them more affordable. He said that although this might seem to entail loss in revenue this would not actually be the case as communities would be spending less on buying drugs to treat malaria. He urged other countries to remove taxes and tariffs.

The country sent delegates to the African Summit on Roll Back Malaria, held in Abuja, Nigeria and signed the Declaration.

**Partnerships**

- Partners have been active in a number of projects:
  - Promotion of the use of ITNs through PSI Social Marketing Project in five districts of the country;
  - Kilombero Net Project in Morogoro;
  - USAID is supporting prophylaxis for pregnant women;
  - DFID, Irish Aid WB is supporting new drug policy through basket funding;
  - DFID is supporting the East African Network for Monitoring Antimalarial Drugs;
  - JICA is supporting training of nurses on nursing care of severe malaria and laboratory technicians on malaria diagnostics;
  - The SWAPs approach to planning, monitoring and financial management with basket funding has been adopted;
  - The Italian government has promised to support malaria control activities in the area of developing and applying a strategy for malaria control in rural areas using a health map and strengthening laboratory services;
  - Physicians, paediatricians, members of the pharmacy board, IMCI, the medical stores and WHO are participating in the formulation of new anti-malaria drug policy which has now been finalised;
  - TEHIP is promoting the use of ITNs in two regions; and
  - A Facilitators’ Group, with membership from various agencies, has been created.

- Training in case management of severe malaria has been extended to include private practitioners.

- The country has included a number of members of NGOs and the civil society as facilitators for the situation analysis.

- A strategy is being developed by WHO with other officers involving all health-related activities within HSR. A task force of bednet manufacturers, pesticide companies and NGOs has been created to facilitate the scaling-up of ITNs. The Tanzania malaria team was involved in the sub-regional consensus building meetings and the 2nd Meeting of the RBM Global Partnership.

- The UN bodies in UR Tanzania and some bilateral organisations hold quarterly meetings to discuss health issues. The Programme Manager of malaria and NPO-mal presented RBM in 1999 at such a forum.

**Institutional arrangements**

- Capacity building through SWAPs will take place at both regional and district levels.

- The existing structure for malaria control is being used.

- The Ministry of Health is seeking to increase the capacity of the malaria unit by deploying an extra public health specialist.

- The country has declared its interest in implementing RBM with the ongoing health sector reforms.

**Strategy development**

- A statement of intent has been developed and is being implemented. Activities will include:
  - A strategy review through a district situation analysis, is planned for August/September. Facilitators have already been trained and documents have been translated into Swahili.
  - In addition to the country's ongoing Health Sector Reforms a few districts were selected to measure baseline information on major communicable diseases.
  - Within the Health Sector Reforms a programme of work covering all health-related subjects has been developed. Partners who have joined the basket funding include DFID, Danida, Irish Aid and others.
Forthcoming action

- Training for facilitators in carrying out RBM situation analysis in Zanzibar.

Uganda

Introduction

- Uganda’s population of 20.9 million is growing at an annual rate of 2.5 percent. The Total Fertility Rate is 6.9 and life expectancy, according to the Human Development Report 1998, is 42.
- The Human Development Report 1998 also reports that 50 percent of the population earns less than USS1 a day, the GNP per capita was $240 in 1995 but the real GDP per capita was $557. Uganda’s Human Development Index rank in 1998 was 160.
- 90 percent of the country is highly endemic. Challenges include recent epidemics in highland areas and a rising resistance to chloroquine.
- The country’s malaria burden is severe: 25-40 percent of outpatient cases, 20 percent of hospital admissions and 9-14 percent of inpatient deaths are attributable to malaria.
- According to the 1995 Burden of Disease Survey in Uganda 15.4 percent of life years lost due to premature death are attributable to malaria. (cf. 10 percent ALRI, 9.1 percent AIDS).
- It is estimated that in areas of high malaria transmission 23 percent of deaths of under-fives are attributable to malaria and 11 percent in areas of lower transmission. With an under-five mortality rate of 159/1000 this equates to a malaria specific mortality of 18-37/1000 or 26,800-40,700 under-five deaths due to malaria annually.
- Health service coverage is around 50 percent at the primary level. 90 percent of the population live in highly malaria-endemic areas. Challenges include (1) recent epidemics in highland areas, (2) rising resistance of *P. falciparum* to chloroquine and, to a lesser extent but still importantly, to SP. The government’s National Health Policy now has malaria as its first-named priority disease. This is beginning to be reflected in district health plans as well as at the lower levels of the health system. The MOH has recently decided (June 2000) to modify the antimalarial drug policy.

RBM action

- Case management:
  - Drug efficacy studies are being conducted and mechanisms for drug policy review are being established. Antimalarial drug sensitivity studies are taking place under the East African Network for Monitoring Antimalarial Treatment (EANMAT);
  - Guidelines are being produced on the treatment of uncomplicated malaria and malaria microscopy; and
  - Production of training manuals on severe malaria and training of trainers.
- Malaria in pregnancy:
  - Guidelines for malaria in pregnancy are being prepared; and
  - Task forces will take forward IEC/advocacy strategy and logistics of implementation.
- Vector control:
  - Piloting of ITMs in schools, and hospitals;
  - Social marketing of bednets in five districts (groundwork is currently being done by a social marketing organisation);
  - Production of guidelines on mosquito control;
  - Production of a training manual for ITMs and training of trainers; and
  - Tax and tariff waiver on ITMs is under consideration for the next financial year.
Epidemic preparedness and response:
- Documentation of 1998 malaria epidemic;
- Training of staff in epidemic-prone districts and establishment of forecasting systems; and
- Response to upsurge in malaria in south-western districts in December 1999.

Surveillance and operational research:
- Operational research in various subjects, including home management of malaria;
- Situational analysis of malaria control in at the districts; and
- EANMAT and epidemic surveillance

General:
- Uganda participated at the Regional Consensus Building Meeting held in Nairobi in April 1999 with a high-level delegation;
- Establishment and facilitation of zonal teams in Malaria and IMCI, training of zonal team members; and
- Management training for MCP HQ staff.

Political commitment
- Uganda's Head of State has committed the country to the RBM partnership in writing.
- The country participated in the Regional Consensus Meeting.
- Malaria is the first named priority in health sector strategic plan.
- Uganda launched RBM in June 2000. The inception was marked by a National Malaria Day.
- Uganda attended the African Summit on Roll Back Malaria and signed the Declaration.

Partnerships
- Monthly meetings are held between MOH and donors. They are chaired by senior management and various departments within the MOH are invited as well as donors.
- Uganda is in the process of establishing a SWAP.
- Active collaboration has been established between MCU and the IMCI program. A system of 10 zonal teams, covering two to six districts each, allows both MCU and IMCI staff to maximise their support to districts and carry out joint activities. Monitoring tools and training materials are being harmonised.
- There is active collaboration with Vector Control Division, School Health, Health Education and other programmes; collaboration with the police, army and other institutions on design and implementation of malaria control activities; and, collaboration with research institutions on operational research.
- Social mobilisation of youth and women community leaders in collaboration with women MPs in 16 Districts.
- A wide range of partners/stakeholders are represented on the ITM working group, the drug policy review and the malaria in pregnancy task forces.
- Uganda is participating in the East African network for Monitoring Antimalarial Treatment.
- Theme-specific task forces or monitoring groups have been created.

Institutional arrangements
- The MOH has enhanced the capacity of the NMCP with additional manpower, including secondment from DFID. This has been further enhanced by the establishment of zonal teams. Responsibility for implementation of malaria control activities lies at district level with central headquarters providing guidelines, training and technical support together with additional support during epidemics.

Strategy development
- The NMCP has a strategic plan and detailed action plan which incorporates all the main features of RBM. A summary log frame, with key indicators, is incorporated in the health sector strategic plan.
- A statement of intent on RBM was finalised.
A Malaria Advocacy Day was held in 2000.

Strategy formulation for ITMs is in progress.

Rapid assessment of ITMs in 20 districts has been completed.

Situational analysis of malaria control is in progress in all districts.

Zambia

Introduction

Zambia has an estimated population of 10 million people, 42 percent of whom live in urban areas. Malaria is endemic throughout Zambia, with transmission ranging from holoendemic along major river valleys to hypoendemic in large urban areas. Highlands, plateaux and urban areas are prone to malaria epidemics. More than 95 percent of all malaria infections are due to *P. falciparum*. The vectors are members of the *An. gambiae* complex.

Malaria is a major health problem in Zambia. Crude parasite rates are estimated at 75-90 percent in rural areas and 20-70 percent in urban areas. Malaria accounts for 31.8 percent and 35.6 percent of hospital and health centre facility admissions respectively. Mortality rates in the range of 14.8 percent and 21.1 percent have been recorded at hospitals and health centres respectively. In addition there is a high degree of therapeutic failure (both clinical and parasitological) to chloroquine, ranging between 20 percent and 50 percent.

Malaria control is integrated into the national health package of Zambia's Sector Wide Approach (SWAPs). The country has been running a decentralised district-based basket Financial Management System (FAMS) since 1994. The malaria programme is one of the SWAP's areas of focus and is managed through the district-based package of the health care system.

RBM action

Zambia participated in the pre-testing of situation analysis instruments for RBM.

The country participated in the Maputo Regional Consensus Meeting with a high-level delegation.

In August 1999, a retreat of key MOH personnel was held in the regional office to prepare the statement of intent for the country partnership. This was done with the support of consultants from RBM Secretariat.

The first stakeholders meeting, called the Partners Briefing Meeting, was held in December 1999. A total of 103 people attended representing NGOs, various public sector ministries, bilateral and multilateral agencies. The meeting was opened by the Minister of Health and a number of one-on-one discussions were held with partners, including DFID, Ministry of Finance and Economic Development (MOFED), Zambia Revenue Authority (ZRA), UNICEF, WHO, some NGOs and other parties.

Attempts have also been made to remove tariffs and taxes on mosquito nets and insecticides.

In March 2000, a meeting was attended by a cross-section of local scientists, implementers and partner representatives to review the findings of the exercise on the desk situation analysis and to draft a national strategy.

In March 2000, deputy ministers from several government ministries met to plan interministerial coordination of the RBM movement. They resolved to create an interministerial task force coordinated by the office of the vice-president at the level of Deputy Ministers.

Drug resistance studies, vector mapping, epidemic preparedness in epidemic-prone districts and distribution of malaria IEC materials during national immunisation days were planned.

RBM Zambia co-sponsored World Health Week, where malaria messages were linked to the theme: Safe blood starts with me.

AFRO Region
The Integrated Malaria Initiative, initially conducted in five districts, was expanded to 14 districts as a model for scaling-up.

Baseline studies, research on the economics of malaria, and SFH KAP studies on Child health were conducted. The social marketing of a branded ITN was undertaken in one of the commercial urban centres in Zambia.

Formulation of malaria programme indicators, provision of supplies and equipment for DHMTs, health centres and community volunteers.

Training of neighbourhood health committees in malaria prevention and control, training of malaria volunteers and training of health workers in malaria and IMCI.

IEC material development and implementation in IMI districts.

**Political commitment**

- Zambia's Head of State has committed the country to the RBM partnership in writing to the Director General of WHO.
- The Minister of Health has endorsed the statement of intent and personally distributed it to partners.
- An inter-ministerial task force of deputy ministers has been created and will be coordinated directly by the office of the Vice-President to oversee the implementation of RBM action.
- Zambia sent a high-level delegation to the regional inception meeting held in Maputo in April 1999 led by the Acting Permanent Secretary.
- The Minister of Health officially launched RBM at a partners meeting in December 1999.
- Zambia was represented by the Deputy Minister of Health at the second RBM Consultative Meeting in Geneva, in February 2000.
- A delegation attended the African Summit on Roll Back Malaria held in Abuja, Nigeria in February 2000 and signed the Declaration.

**Partnerships**

- A meeting of partners interested in malaria work which used to meet informally every month has become officially designated as the partnership forum to spearhead national strategy and the development of the RBM partnership. The partners forum has directly participated in the drafting of a desk situation analysis and dialogue on national strategy.
- Early developments of social action includes the formation of a movement called Zambia Youth for RBM.
- An early result of the partnership processes is the bringing to the fore of resources from various partners hitherto managed on separate lines. The current inventory shows that UNICEF has a US$ 600,000 commitment for ongoing support to community-based ITN promotion; USAID has a commitment of US$ 310,000 towards building capacity of the National Malaria Control Centre, USAID has an additional commitment of US$ 200,000 for ITN support at district level, JICA has a commitment of US$ 2 million in support of development of district level capacity and drug supplies in commodity support, while WHO has a total commitment of US$ 220,000 to support activities including drug efficacy studies, RBM inception activities and critical on-going activities.
- Zambia's government and other partners are supporting service delivery through the district basket, the African Development Bank, through a SWAP support, has an ADF loan of UA 8.92 million operational from 2000. At the time of preparation of this update, UNICEF has recently announced that they will receive an additional US$ 1 million for RBM in Zambia.

**Institutional arrangements**

- An officer has been appointed to strengthen the capacity of the control centre to meet the anticipated increase in activity. The central level has also been strengthened in terms of both manpower and other resources. The integrity of the central institution dealing with malaria has been preserved and strengthened in the new health systems re-structuring process of 2000.
The Central Board of Health has appointed an extended secretariat to involve other health sector units and programmes in the formulation of the national strategy from the beginning.

An RBM technical network comprising technical officers connected to the field of malaria control has been formed.

At the political level, an inter-ministerial task force has been created to foster collaboration and facilitate involvement of various government ministries.

**Strategy development**

- The statement of intent for the inception process was finalised in August 1999.
- Work on desk situation analysis was completed in February 2000.
- The first draft situation national strategy was prepared at a retreat in March 2000.
- District level RBM inception is in place.

**Forthcoming action**

- Next steps in strategy development include a national stakeholders meeting to adopt the draft strategy scheduled for April 2000.
- District level inception plans are expected to take three or four months around May and July, 2000.
- In October 2000 RBM will be presented and discussed formally as an agenda item in the SWAP’s partners discussions.
Introduction

Malaria is endemic throughout Afghanistan at altitudes below 1,500m. Malaria belongs to two eco-epidemiological types: Oriental type south of Hindukush and Palearctic type in the north. About 80-90 percent of malaria cases are *P. vivax*, the rest *P. falciparum* which is prevalent mostly in the south and in Badakhshan.

The main transmission season starts in May-June and peaks in October-November.

Malaria in Afghanistan is an illustration of two epidemiological paradigms, namely malaria associated with socio-political disturbances and malaria associated with agricultural practices (rice cultivation). The annual number of cases is estimated at two to three million, although the number officially reported in 1999 was 395,581. *P. falciparum* represented 11.2 percent of the total microscopically confirmed cases in 1999.

Out of the 21 million population of Afghanistan (1999 estimate), more than 12 million are estimated to be living in malaria-endemic areas. Many parts of Afghanistan are always prone to outbreaks of *P. falciparum* malaria epidemics. There is evidence that Afghanistan contributes to the re-emergence of malaria in the CIS countries as well as the eastern parts of Iran.

The health services are provided by various health care providers (MoPH, NGOs, the private sector and traditional healers). However, there is no effective coordination for service provision. Self-medication is a widespread practice. The private sector is providing large quantities of anti-malarial drugs of uncertain quality. The northern territories are still in an acute emergency phase. Challenges for malaria control include:

- Absence of a central core for malaria control programme;
- Breakdown of the infrastructure; and
- Inaccessibility of many areas due to conflicts.

Priorities are to:

- Extend facilities for early diagnosis and prompt treatment;
- Promote self-protection measures (use of insecticide treated nets); and
- Epidemic preparedness.

RBM action

Afghanistan participated in both the Baku (August 1999) and Cairo (September 1999) meetings and was represented by three senior officials of the MoPH. A consultant participated in the RBM briefing workshop in Harare (February 2000). A statement of intent has been developed and is currently being reviewed for support.

A Plan of Action for malaria control for 1999 was formulated in consensus with all stakeholders during the national planning workshop. WHO facilitated the establishment of the Regional Technical Committees on malaria and leishmaniasis in Kabul, Jalalabad and Kunduz as coordinating structures for stakeholders. The Institute of Malaria and Parasitic Diseases has been reactivated.

Political commitment

The Minister of Public Health issued a statement committing Afghanistan to RBM at the annual national health sector planning workshop. A decentralised regional health sector approach has been established. The Director General of International Health is assigned the task of being in charge of the inception process. A Task Force has been appointed to spearhead the RBM inception process.
Partnerships

- Partners—WHO, WFP, Kabul municipality, HealthNet International, and other NGOs—support malaria control activities through capacity building in six regions, distribution of medical supplies, strengthening of laboratories, distribution of ITNs and revitalisation of vector control activities. The BBC drama series—New Home, New Life—and Radio Kabul provide catalysis for national movements to roll back malaria.

- New partnerships have been established with UNDP, UNICEF and WB. Enhanced partnership and sectoral development with other UN Agencies—UNOPS, HABITAT, UNHCR, WFP, FAP etc.

Institutional arrangements

- A decentralised regional health sector approach with different levels of management teams has been adopted.

- A Technical Consultative Committee under the framework of the Principled Common Programming (PCP) for Afghanistan has been formed to spearhead the inception process within the context of a wide sector approach. PCP is providing a strategic framework leading to the establishment of a shared support system among Afghanistan Aid Community.

- Malaria Technical Committees in four regions have been formed within the context of PHC and regional structures.

- A 1st Partners Meeting was held in May 2000. A working group has been established, TORs have been drafted and a framework for the next steps has been set.

Strategy Development

- The 1999 POA has been received and is currently being reviewed by the Regional Office. A statement of intent is awaited. Selected districts in the eastern and southern regions have been targeted for RBM. The northern region is in an acute stage of emergency.

Forthcoming Critical Actions

- Inception meetings are planned in the relatively stable areas (60 percent) of the country.

Djibouti

Introduction

- Djibouti belongs to the zone of Afrotropical malaria where P. falciparum is overwhelmingly predominant and An. arabiensis the main vector. Malaria was not a major problem until 1988, when increased agricultural activities developed, particularly along the wadi which flanks Djibouti City.

- Malaria in Djibouti is unstable, epidemic-prone and affects all age groups. The priority actions for malaria control are:
  - Access to early diagnosis, prompt and effective treatment of malaria;
  - Detect early and effectively manage outbreaks; and
  - Selective vector control wherever sustainable and cost-effective (larval control, use of insecticide-treated materials).

- Cases of chloroquine resistance P. falciparum have been reported.

RBM action

- Djibouti participated in the Nairobi consensus meeting (April, 1999) and was represented by officials from Finance, Planning, the Secretary General MoH, and the Communications Officer and Manager of the National Malaria Control Programme. The outcome of the meeting was a statement of intent focussing on situation analysis, advocacy, strengthening health information systems, and development of the strategy and Plan of Action for rolling back malaria in Djibouti. A national inception meeting is being planned.
**Political Commitment**

- A multisectoral coordinating body has been set up to take forward the introduction of RBM. However, there is no information yet on its composition or Terms of Reference. The Secretary General MoH is the focal point for RBM.

**Partnerships**

- Partnerships which have been formed with various government sectors, international organisations, non-governmental organisations, local associations and community groups, are being strengthened through advocacy using print, public and private mass media. New responsibilities of the various target sectors have been defined.

**Institutional Arrangements**

- A multisectoral coordinating body has been set up to take forward the introduction of RBM and the Secretary General, MoH, is the focal point for RBM.

**Strategy Development**

- Desk analysis and field studies are planned in three districts (Djibouti, Ali Sabieh and Tadjourah).
- A situation analysis will involve multidisciplinary and multisectoral teams with technical support provided by partners.

**Forthcoming action**

- A situation analysis to be undertaken by a multidisciplinary and multisectoral team made up of national experts with technical support by WHO.
- Documenting strategy for rolling back malaria.
- Development of country plan of action.
- A resource mobilisation meeting will be held targeting partners such as other sectoral ministries, bilateral and multilateral organisations, non-governmental organisations, the private sector, the media and local associations.

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**Egypt**

**Introduction**

- Malaria in Egypt belongs to the Palaeartic eco-epidemiological type. The incidence of malaria was high up until the beginning of the 1960s but declined dramatically during the decade. During the 1990s, local transmission continued only in Fayoum Governorate, where *P. falciparum* predominated.

- Although there was a considerable increase in malaria during 1994, efforts were made to improve the situation, mainly through environmental vector control. Malaria incidence, consequently, dramatically fell in 1996 (23 cases of local transmission). By the end of 1998, there were no autochthonous cases detected anywhere in the country, even in Fayoum Governorate.

- However, the challenges facing Egypt today are:
  - Residual transmission in Fayoum;
  - Receptivity of the agricultural areas to reintroduction of malaria by gametocyte carriers; and
  - The possibility of the spread of a very efficient vector from Sudan along the Nile Valley.

- A coordination meeting on malaria control in North Africa (Tunis, May 1997) reviewed the situation and recommended that the objective of interrupting residual transmission within five years be set up in Egypt. It also concluded that surveillance needed improvement.
Priorities are to:
- Suppress residual transmission in Fayoum;
- Improve malaria surveillance elsewhere; and
- Protect the country from the importation of *An. arabiensis*.

**RBM action**

- Activities related to prevention of reintroduction of malaria include training of PHC personnel in malaria management, surveillance and control, fellowships to trainees, coordination with Sudan to prevent reintroduction of *An. gambiae* (Gamabia project between Egypt and Sudan, 1996), activities for diagnosis, surveillance and control of imported cases and vector control.

- Egypt participated in the Nairobi consensus and inception meeting (April, 1999) and the regional consultation on RBM meeting in Cairo (September 1999). A statement of intent has been developed (January, 2000) and is currently being supported. A multisectoral national task force for the interruption of residual malaria transmission has now been set up and WHO is providing technical and financial support.

- A Contractual Services Agreement (CSA) has been processed for a local expert to assist the nationals in situation analysis, developing the strategy for interruption of malaria transmission and prevention of its re-introduction (April–July 2000).

**Political Commitment**

- Egypt is committed to the interruption of malaria transmission through advocacy and political commitment at national and local levels with the involvement of other concerned sectors and agencies. This initiative is expressed by allocating US$ 75,000 for RBM actions in the 2000-2001 Country Regular Budget.

- The Minister of Public Health publicly committed Egypt to RBM at the Conference of African Ministers of Health (Cairo, 1999). A multisectoral national task force has been set up to spearhead the interruption of residual transmission process.

**Partnerships**

- In 1999, meetings and discussions were held between the malaria administration and the Quarantine Administration, General Directorate of Febrile Illness and the Ministry of Higher Education to develop a strategy for managing imported cases.

- Partnerships with other programmes (fever hospitals, quarantine units and primary health care units), sectors (Ministries of Agriculture, Irrigation and Land Reclamation) and the private sector (private clinics) are also established.

- The RBM inception process included multisectoral meetings and discussions with concerned sectors, national, international and bilateral agencies, as well as the media.

- Egypt is pursuing cooperation with Sudan to prevent the reintroduction of *An. gambiae*.

- The total estimated budget for implementing the statement of intent was US $32,000. WHO is contributing US$ 20,000, and the MoPH, UNICEF, WB, JICA and UNDP are providing the rest. The statement also includes provisions for a consultant to finalise the strategy and country Plan of Action, the cost of which is included in the regular budget.

**Institutional arrangements**

- In March, 2000 a task force for the interruption of malaria transmission was set up at national and governorate levels (Fayoum and Aswan). Membership and scheduled activities of the task force have been stipulated. Documents related to malaria control in Egypt have been reviewed.

- Egypt opted to implement RBM actions within the purview of the Malaria Control Department of the MoPH. However, a national task force has been instituted to address the interests of appropriate sectors and programmes.
**Strategy Development**

- Strategy development will be based on the results of the situation analysis.

**Forthcoming action**

- Situation analysis.
- Strategy development.
- Development of the country Plan of Action.
- IEC activities:
  - Awareness/mobilisation activities (June 2000);
  - Organising information days for participants in risk areas in Fayoum Governorate emphasising aspects of environmental management;
  - Producing a brochure on malaria for people travelling to endemic countries;
  - Organising information days for persons working for travel agencies; and
  - Producing information leaflets about malaria for medical doctors.

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**Morocco**

**Introduction**

- Due to intense efforts at interruption of transmission, only one residual focus of malaria (*P. vivax*) remains (Khouribga) in Morocco.

- Morocco has been *P. falciparum*-free since 1974. Total interruption of malaria transmission was twice almost achieved—in 1978 and 1981-83. However, success could not be sustained, as the goal at the time was only to control malaria, and not to interrupt transmission. Since 1990, there has been a clear reduction in transmission as shown by the number of autochthonous cases falling from 781 in 1990 to 68 in 1998. Therefore the need to redefine the goal of malaria control in Morocco to interrupt malaria transmission became evident. The objective of eliminating malaria in Morocco in 2002 was subsequently adopted.

**RBM Action**

- Morocco participated at the Nairobi Consensus Building and Inception Meeting in April 1999. This was followed by a series of country inception meetings, involving various programme managers within the Ministry of Health, other sectors at central level and in nine provinces at risk of malaria on the concept, strategy and objectives of RBM.

- Activities include advocacy and sensitisation within the wider health sector. The Regional Office is currently providing support to the Statement of Intent that focuses on:
  - The elimination of malaria by 2002;
  - Prevention of reintroduction of malaria after elimination; and
  - Setting up a standardised strategy for the prevention and control of imported malaria.

- The contents of this Statement of Intent were reviewed during the Cairo meeting in September 1999. The Statement of Intent has been funded.

- A newsletter entitled *Tous contre le paludisme* has been published.

- Sensitisation sessions for target groups in 15 provinces were held in April 2000.

- Leaflets on elimination strategy were developed in May 2000.
A seminar for border health personnel was held in June 2000.

**Political Commitment**

- A Health Planner has been designated as the focal person for RBM in Morocco. A multisectoral coordinating structure comprising representatives from MoH, local authorities and communities is set up to take forward the introduction of RBM as an opportunity to interrupt malaria transmission in Morocco. The Government's full commitment to RBM is evident by its pledge of US$ 100,000 per annum up to 2003.

**Partnerships**

- Partnerships with Ministries of Communication and Education, travel agencies, private medical doctors and local authorities are being nurtured while, at the provincial level, an intersectoral structure, in which local authorities and communities participate, exists. The Government has pledged US$ 100,000 per year up to 2003 and WHO has pledged US$ 20,000 for 2000.

**Institutional arrangements**

- A multisectoral coordinating structure comprising representatives from the Ministry of Health, local authorities and communities has been set up to stimulate and promote effective multisectoral collaboration leading to community actions for eliminating malaria in Morocco.

**Strategy development**

- Morocco's initial step in the RBM process was to develop a strategy to eliminate malaria from the country by 2002. Consensus building activities to adopt the strategy then took place at national level.

- The second step entailed provincial level activities following a situation analysis that led to the identification of areas at risk within the nine provinces and the development of plans of action focussing on advocacy, IEC and capacity-building activities. Both public and private sectors were successfully targeted.

**Forthcoming actions**

- Sensitisation sessions on elimination of malaria in ten provinces with effect from February, 2000.

- Retraining 50 microscopists from 25 provinces with effect from February 2000.

- Retraining 30 entomological technicians from 15 provinces with effect from April 2000.

- Producing IEC materials for travellers and private physicians, from May 2000.

- Training seminar for 30 border health personnel, June 2000.

- Assessment of malaria elimination process with effect from December 2000 in Kenitra.

**Outcome**

- Only two residual malaria cases were detected in Khouribga province in the first quarter of 2000 compared with 17 cases in 1999.
Oman

**Introduction**

- The Sultanate of Oman is the third largest country in the Arabian Peninsula after Saudi Arabia and the Republic of Yemen. Oman, which lies in the south-eastern corner of the peninsula, consists of mountains and plains interspersed with wadis and areas of vegetation, a large proportion of which are suitable for cultivation. Ecologically, Oman can be divided into four main strata—coastal, foothills, oasis and island areas. The interior plateaux and wadis make up roughly 65 percent of the total land area, with mountains and desert forming 15 percent and 20 percent respectively.

- The population of the Sultanate of Oman is estimated at 2.5 million distributed in 59 wilayat. Administratively, Oman is divided into 10 regions, each of which (except for islands) has at least one Directorate General of Health Services and one Regional Reference Hospital. The peripheral health infrastructure is quite adequate. There are 101 health centres, four extended health centres and 24 hospitals. Health services are provided to each wilayat by health centres.

- In the past malaria was widespread in the Sultanate of Oman at hypo to meso to hyperendemic level. The climate, topography, demography, presence of effective Oriental vectors, the close relationships with East Africa (Zanzibar) and the socio-economic situation were all-important factors behind the historical endemicity of malaria. A control programme started in the mid-70s, but did not have the desired impact. Malaria remained the priority health problem during the 1980s, when about 300,000 clinical malaria cases were recorded annually, with *Plasmodium falciparum* malaria accounting for up to 98 percent. The situation was very serious and was expected to deteriorate with the rising increase in the vector and parasite resistance to insecticides and anti-malarials respectively.

- The real turning point came in 1991 when a Malaria Eradication pilot project was launched in the Eastern (Sharqiya) Region and was then phased into other regions. It has resulted in a significant reduction of autochthonous cases of malaria. There were only 114 such cases in 1998 out of a total of 1,091, which implies that about 90 percent of cases were imported.

- The number of autochthonous cases during January to August 1999 was 13, compared with 63 during the same period in 1998. Transmission of *P. falciparum* practically stopped. However, Oman is under constant risk of the reintroduction of malaria from the Indian sub-continent as 27 percent of Oman’s population are expatriates, mostly from India and Pakistan, but also from East Africa, particularly Zanzibar.

**RBM action**

- Oman took part in the Cairo consultation meeting on RBM in September, 1999. Three senior health officials represented the country—the Director General Health Services, South Sharqiya Region; the Acting Director for Environmental Health and Malaria Eradication and Head of Malaria Epidemiology; Muscat and Director of Evaluation and Monitoring, Muscat.

- International Congress on Infectious and Tropical Diseases, March 2000.

- Meeting of Gulf Cooperation Countries, at which malaria was discussed, March 2000.

- RBM objectives for the Sultanate of Oman are to;
  - completely interrupt malaria transmission by eliminating the residual foci in North Batinah and Musandam regions; and
  - Maintain a malaria-free status in areas where transmission has been interrupted.

- Oman submitted an RBM Plan of Action in January 2000 focussing on:
  - Technical assistance in the evaluation of the quality of laboratory diagnoses;
  - Capacity development on serological techniques;
  - Development of a system for monitoring therapeutic efficacy of antimalarial drugs; and
  - Training of senior field sanitary inspectors on operations, entomology and field epidemiology.
Political commitment

- The political commitment to RBM in the Sultanate of Oman is represented by the direct involvement of the Minister of Health in malaria eradication programme actions. A multisectoral coordinating structure has been set up to spearhead the inception process.

Partnerships

- Intersectoral collaboration has been implemented since 1991. A national committee for malaria eradication comprising Ministries of Health, Information, Defence, Interior, Agriculture and Fisheries, Regional Municipalities and Environment, Education & Youth, Justice, Awkaf and Islamic Affairs, Social Affairs, Transport and Communication has been set up.

- The private health sector has been actively involved in case detection since 1996. The involvement of the private clinics/hospitals, non-MoH institutions and the establishment of a malaria-screening centre at Seeb International Airport have helped strengthen case detection mechanisms.

- Over the past few years, the Malaria Eradication Programme (MEP) has received outside the health system both logistical support (station wagon and pick-up vehicles) and financial support from the private sector. Oman is now poised to intensify community level partnership through advocacy and effective communication.

- Cooperation and coordination with neighbouring countries has been strengthened since 1999 with the aim of completely interrupting the transmission of malaria and eliminating the reservoir of infectious cases at the border areas between Oman and the United Arab Emirates. A joint meeting attended by senior malaria staff from both countries was held in December 1999 to conduct quarterly Joint Entomological Surveys at the borders. Similar bilateral cooperation has also been initiated between Oman and Yemen.

- Successful partnerships with international organisations for malaria control was evident in 1994, when UNICEF donated impregnated bed nets. The Gulf Cooperation Countries (GCC) committee for malaria control conducted a meeting in Muscat, Oman, in September 1999, with participation from representatives of the United Arab Emirates, Bahrain, Saudi Arabia, Kuwait and Oman. The sum of 400,000 Saudi Rials (US$ 150,000) was allocated to:
  - Malaria control activities including training, creating awareness, monitoring parasite and vector sensitivity, and
  - Advocacy activities for these six countries.

Institutional arrangements

- A national committee comprising representatives from the Ministries of Health, Information, Defence, Interior, Agriculture & Fisheries, Regional Municipalities and Environment, Education & Youth, Justice, Awkaf and Islamic Affairs, Social Affairs, Transport and Communication has been set up to spearhead the inception process.

Strategy development

- Oman's new malaria control strategy is based on analysis of the malaria situation, and stratification of the problem and resources through baseline entomological data and malarialometric school surveys. A Plan of Action 2000 has been developed and is currently being supported by the Regional Office.

Forthcoming actions

- 5th National Conference on Malaria to be held in Muscat, Oman, October–November, 2000.

- Evaluation of the quality of laboratory diagnoses.

- Training on serological techniques.

- Development of a system for monitoring drug sensitivity.
Introduction

Malaria in Pakistan belongs to the Oriental eco-epidemiological type. Epidemics have occurred at 6-10 year intervals, the last one in 1972-73. About 40 percent of cases are due to *P. falciparum*, which is significantly more common in the Sindh Province (64 percent). *P. falciparum* has developed resistance to chloroquine. The two main malaria vectors—*An. culicifacies* and *An. stephensi*—are both resistant to organochlorines and the latter has also developed resistance to an organophosphate (Malathion). There is also massive importation of malaria from Afghanistan.

According to the recent Malaria Review Mission Report, 1998, malaria, especially *P. falciparum*, is on the increase in Pakistan. Slide confirmed cases in the last five years have varied from a low of 73,516 in 1998 to a high of 111,836 in 1995. Pakistan's population is 139 million, and therefore the annual parasite incidence is less than one case per 1,000. However, the actual level of malaria is at least five times higher than suggested by official records since these are based on the 20 percent of clients who use government services. According to a conservative estimate, about 500,000 malaria cases occur per annum.

Pakistan's malaria control programme is also facing organisational problems due to:

- Insufficient rapport between central headquarters and malaria control programmes in provinces; and
- Rapid turnover of staff and relocation of recently trained specialists.

RBM action

A number of research projects addressing feasibility and methods of net utilisation have already been carried out in Pakistan, including two supported through EMRO/TDR/CDS Small Grants Scheme. A system for the continuous monitoring of *P. falciparum* susceptibility to drugs has been established. An early warning system for epidemic forecasting and preparedness has also been established. Educational materials and guidelines for control and treatment of malaria have been developed.

Pakistan participated in the Regional Consultation Meeting on RBM, Cairo, Egypt, in September 1999. Three representatives from Malaria Control, MoH, Pakistan Medical Research Council, and the National Institute of Health, Islamabad, attended the meeting.

A provisional Plan of Action was prepared and approved in the inter-ministerial meeting held in Islamabad, August 1999. The POA has now been forwarded to provincial governments for their views and suggestions.

In January 2000, Pakistan developed a statement of intent for rolling back malaria and shared this with EMRO. Its contents focus on:

- Development of intersectoral collaboration and linkages with UN and other partners;
- Institutional strengthening;
- Review of exiting vector control interventions,
- Identification of priority operational research; and
- Upgrading the vector control unit in the MOH, Islamabad, to provide training.

Dr Athar S. Dil, Joint Executive Director, NIH Islamabad, participated in the 3rd Global Partners Meeting, Geneva, February 2000.

A mission was fielded in April 2000 by the RBM Technical Support Network for malaria control in complex emergencies to review the UNHCR malaria control programme for Afghan refugees in Pakistan.

Political Commitment

A National Steering Committee to spearhead RBM activities has been formed with two working groups focussing on managerial and research needs. There is also a multisectoral coordinating structure comprising representatives from Ministries of Health, Agriculture, Irrigation, Water and Power, Education, Population Welfare, Environment, along with national and international agencies, bilateral and multilateral agencies, the private sector, research institutions and the media.
The focal person is Dr Athar S. Dil, Joint Executive Director, NIH Islamabad.

**Partnerships**

- Collaboration with DFID on malaria control has been strengthened by a review mission in Pakistan undertaken by the Malaria Consortium. The mission concluded that the malaria control programme needed reorientation (May 1998).

- The Pakistan Government, in its Statement of Intent, has targeted support from WHO, UNICEF, UNDP, WB, DFID, the Asian Development Bank, as well as local and international NGOs.

- WHO continues to provide technical and financial support to Pakistan for the integrated control of diseases. Funds at a level of US$ 100,000 are included in the regular budget for malaria control. Additional funds of US$ 40,000 are included in the RBM composite plan to take forward the inception process. Further funding is expected from other partners.

- The total funds needed for the inception process have been estimated at US$ 63,500, of which US$ 31,500 is being requested from WHO. The balance will be secured from the MoH and international agencies.

**Institutional arrangements**

- An RBM task force has been constituted at the national level (February 2000). It comprises various sectoral ministries and membership includes representatives from MoH, Provincial Health Department, National Institute of Health, Pakistan Medical Research Council, Directorate of Malaria Control, National Institute of Malaria Research and Training, NGOs, WHO. The focal person is Dr Athar S. Dil, Joint Executive Director, NIH Islamabad.

**Strategy development**

- A Statement of Intent has been prepared and is being reviewed. A desk analysis is planned in view of the recently concluded DFID Review Mission report.

- Situation analysis is being undertaken with an emphasis on evaluation of the existing surveillance mechanisms and information system, stratification of malaria, and support the health system to provide prompt care at primary healthcare level.

**Forthcoming actions**

- Advocacy, social mobilisation at national and community level through workshops and seminars.

- Development of a strategy for RBM and the Plan of Action.

**Somalia**

**Introduction**

- Somalia belongs to the zone of Afrotropical malaria where *P. falciparum* is overwhelmingly predominant. Malaria is unstable and epidemic-prone in desert and semi-desert areas, mostly in the North, where it affects all age groups, with high fatality rates during epidemics. In less arid and irrigated areas, mostly in the South, malaria is meso- and hyperendemic, severely affecting children. Malaria is one of the leading causes of death in all age groups.

- The malaria situation in Somalia deteriorated during the war, due to a breakdown of the health infrastructure and a widespread shortage of drugs.

- The priority for malaria control is to provide access to early diagnosis and prompt and effective treatment of malaria. Opportunities for vector control through indoor residual spraying may be limited although anti-larval measures can be effective in some arid areas. The use of insecticide-treated materials, if culturally acceptable, needs to be considered.
There are no organised malaria control activities in most parts of the country. However, some activities have begun in northwest Somalia (Somaliland), with headquarters in Hargeisa.

**RBM action**
- Somalia participated in the Nairobi consensus and inception meeting in April 1999. However a Statement of Intent is yet to be developed. RBM has provided support for a consultancy to help develop the Statement of Intent.

**Political commitment**
- The active participation of representatives from various parts of the country—north-west, north-east, central and southern—at the Nairobi Consensus Building Meeting shows some commitment to RBM. Written requests for the introduction of RBM in northeast Somalia have been received and appropriately addressed.

**Partnerships**
- Partnerships with non-governmental organisations in the different sections of the country are ongoing but require more effective coordination.

**Institutional arrangements**
- Not yet developed.

**Strategy development**
- Not yet developed.

**Forthcoming actions**
- A report on the consultancy is expected by the end of August 2000.

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**Sudan**

**Introduction**
- Sudan is the largest country in Africa and shares borders with nine countries. It is divided into 26 States, which are further subdivided into 108 Provinces and 614 Localities (Mahallyah). Sudan is classified from north to south into desert (34 percent), semi-desert/shrubs (20 percent), woodland/forest (35 percent), agricultural land (7 percent) and swamps/wetlands (1 percent).

- The country's physical infrastructure is generally weak—transport and communication systems are poor, financial resources are limited, and above all, the prolonged civil war remains a major obstacle to the country's development. The recent development of a Federal system resulted in decentralisation and the promotion of "bottom-up" approaches. Constitutional decrees have promoted devolution and deconcentration to the State level of many functions, including health.

- With an estimated 7.5 million cases and 35,000 deaths per year, Sudan contributes most of the malaria cases in the WHO Eastern Mediterranean Region. Malaria in Sudan belongs to the Afro-tropical type, where *P. falciparum* is overwhelmingly predominant and *An. gambiae* is the main vector. Endemicity ranges from holo-endemicity in the South, hypo-endemicity in the North and epidemic-prone in Central Sudan. The situation is further aggravated by the spread of chloroquine-resistant* P. falciparum*, increasing insecticide resistance of vectors and inaccessibility of many areas, particularly in the South.

- Based on health facility data, malaria represents 20 percent of all deaths occurring in the country as well as 25 percent of total outpatient attendances and 32 percent of admissions.

**RBM action**
- In North and Central Sudan, a strategy for forecasting, predicting and controlling malaria epidemics is
being instituted, and therapeutic efficacy studies are being undertaken by the National Malaria Administration to guide treatment policy.

In South Sudan, strategies for capacity building, strengthening the drug supply system are being undertaken by NGOs and nationals. Therapeutic efficacy studies are being conducted to determine the extent of chloroquine-resistant *P. falciparum*. The use of insecticide-treated nets is also being considered.

National training activities on disease management, surveillance and vector control are ongoing. Support is being provided to the Blue Nile Research and Training Institute. Operations research on epidemiology, vector bionomics and control methods are also being supported and it is hoped that these will ultimately provide evidence for strategic direction/intervention.

Sudan participated and co-chaired the Nairobi consensus building meeting (April, 1999) and was represented by officials from Finance, Planning, International Health and the National Malaria Administration. Sudan also participated in the Cairo consultation meeting on RBM (September, 1999) with two senior health officials representing the country. Sudan also participated in the 2nd meeting of the RBM Global Partnership, in Harare, Zimbabwe, June 1999.

In August 1999, Sudan developed a Statement of Intent that was shared with the RBM Secretariat. Desk analysis, complemented by cross-sectional mini-surveys in 17 States (15 from the north and two from the south) provided the basis for evidence-based strategy development. The Technical Support Network on Complex Emergencies in August-September 1999 undertook an assessment of the situation in the difficult-to-access states of South Sudan.

A Roundtable Conference on the results of the situation analysis at national level was held in Khartoum in August 1999. Consensus and commitment to the identified top ten priority health problems in Sudan was reached and accepted as framework for all partners during 2000-2001. A draft document on the national situation analysis results is available. Contractual Services Agreements (CSAs) to document the national strategy and country plan of work for rolling back malaria in Sudan have already been issued to the national authorities.

In April 2000, consensus was reached on a workplan following a workshop on integration and collaboration activities between the Basic Development Needs Project and RBM/NMA.

**Political commitment**

The Head of State committed Sudan to RBM in writing in response to the invitation of the Director General of WHO and participated at the African Summit on RBM in Abuja, Nigeria (April 2000) and signed the Declaration and Plan of Action. The Federal Minister and State Ministers of Health have publicly reinstated the commitment of Sudan to RBM at various meetings. At the community level, a series of mass advocacy and sensitisation meetings were held. The Director General of International Health is assigned responsibility for the RBM inception process, and a task force has been appointed to spearhead the process.

In April 2000 a Unilateral Resolution was made to restructure NMA to a National Project for RBM answerable to the Under Secretary of Health.

**Partnerships**

The inception process is being supported by various government sectors, multilateral agencies, national and international NGOs, the private sector, the media and communities. The international NGOs provide support either to control diseases or in specific geographic locations and the role of national NGOs in malaria control is expanding.

WHO continues to provide technical and financial support to Sudan in the areas of health policy and management, health services development, health promotion and integrated control of diseases. UNICEF supports programmes in health and nutrition, water and environmental sanitation and household food security through the child rights approach which focuses on child survival and safe motherhood and community-based health interventions. UNFPA continues to ensure that reproductive health is given high priority in the broader context of the health sector strategy.

UNDP is committed to the support of strategic planning, community development and preparations for emergencies. UNIDO is also committed to supporting the development of healthcare industries, local
pharmaceutical manufacture, occupational health and safety in industry, testing and quality control of drugs and the application of modern information technology. The role of the private sector and investment in health provides the basis for greater involvement of UNIDO in the health sector. WFP signed a letter of understanding regarding school health with WHO in September 1999 which focuses on supporting school feeding programmes in several states. Collaboration in the Basic Development Need projects being implemented in certain states is also being strengthened.

- The Roundtable Conference provided a mechanism for partner consensus building on the identified ten top priority areas for 2000-2001 while the Khartoum Declaration provided a framework for partner commitment to these top ten priority areas.

- The total budget estimate for implementing the statement of intent was US$ 44,500 out of which WHO contributed US$ 23,500 with the remainder provided by UNFPA, UNICEF and the Federal MoH.

- The African Development Bank has provided a grant of US$ 500,000 to support actions for malaria, diarrhoeal diseases and acute respiratory infections outbreaks in three states. The Arab Gulf Fund has committed US$ 100,000 to support malaria control actions and JICA has provided US$ 30,000 to strengthen treatment policy. The FMoH and WRO, Khartoum are discussing a special fund for RBM in South Sudan to support RBM actions in accessible States.

- In April 2000 an integrated partnership plan involving Ministries of Agriculture, Irrigation, Water Resources, Meteorology Department, Community Department, the University of Khartoum and sugar companies in central Sudan was developed.

Institutional arrangements

- A multisectoral coordinating structure—The High Commission—comprising various sectoral Ministries and partners monitors the inception process and facilitates the development of a strategic document for rolling back malaria in Sudan. It also monitors the progress and quality of work produced. A multisectoral technical subcommittee has been set up to spearhead RBM in Sudan.

- Dr Zeidan A Zeidan —Director General of International Health—is designated as the focal point for RBM in Sudan, demonstrating the importance attached to RBM activities. He is supported by Mr Abdalla Ismail Mutaafl, the Technical Officer, WRO, Khartoum.

Strategy development

- A situation analysis at the national level, comprising desk analysis and cross-sectional surveys, has been completed and documented in draft.

- A Contractual Services Agreement has been issued for documenting strategy and the Plan of Action.

- Inception process at State level has been completed.

- Instruments for situation analysis at district level in six endemic states have been adapted, translated into Arabic and used. District and community surveys in the six states have been completed and a draft document is being prepared.

Forthcoming actions

- The schedule for situation analysis in six districts is as follows:
  - Finalisation of methodology and instruments and training by February 2000;
  - District community surveys in six districts by March 2000;
  - Analysis and draft report by May 2000;
  - National and regional workshops on results of the survey by April 2000; and
  - Documentation of the results and formulation of strategic plan and country plan of action for RBM by the end of April 2000.

- Dr. El Sadig Mohamed El Faki, Deputy Director of the NMA, is the focal point of this activity.
Yemen

Introduction

- Malaria in Yemen, with the exception of Socotra Island, belongs to the Afrotropical type, with *An. arabiensis* as the main vector. Malaria is hyper- or mesoendemic in the foothills and meso- and hypoendemic in the coastal plains. Arid and semi-arid hypo- and mesoendemic areas are particularly prone to outbreaks of malaria following heavy or prolonged rainfall. Malaria is mostly hyperendemic in Socotra Island where it belongs to the Oriental type. Areas above about 2,000 metres are malaria-free.

- About 60 percent of the population of 18 million are at risk of malaria. The estimated number of cases is 1.5-2.0 million per year, out of which about 90 percent are *P. falciparum*.

- In the 1990s, malaria control suffered serious setbacks. The situation deteriorated, probably due to a discontinuation of organised vector control activities and climatic change. This was aggravated by the spread of chloroquine-resistant *P. falciparum* and at the same time, a weakening of the organisational structure of malaria control.

- Priorities for malaria control are:
  1. To increase access to early diagnosis, prompt and effective treatment of malaria; and
  2. Early detection and management of outbreaks; and
  3. Selective vector control.

- Yemen is poised for reform, not only in the health sector, but more broadly in its pattern of government and socio-economic development. Civil service reform on classic lines is planned. Legislation providing elected councils at district level has been passed, which will open up possibilities of wider community participation in public service delivery.

- The Ministry of Public Health (MoPH) is putting forward a Health Sector Reform (HSR) strategy designed to address the challenges of the current health system.

RBM action

- Yemen was represented at the Nairobi consensus and inception meeting in April 1999. A Statement of Intent for the introduction of RBM was developed in January 2000 and is now being supported. In December 1999, the WRO was strengthened by recruiting a malarialogist to support the inception process. A national inception meeting, chaired by the Minister of Public Health, attracted over 53 participants from various sectors in February, 2000.

- Yemen also participated in the 2nd Global Partners Meeting in Harare, (June/July, 1999) where consensus was reached on key RBM concepts, issues and solutions. A consultant has been trained in Harare to support the RBM process at country level.

Political commitment

- Both the Prime Minister and Minister of Public Health have publicly committed Yemen to RBM. A new Director has recently been appointed to spearhead the inception process. The Supreme National Malaria Control Committee, a multisectoral structure promulgated by a Prime Minister’s Decree, has been set up to coordinate the process.

Partnerships

- The principal health sector development partners, along with WHO, are UNDP, UNICEF, the World Bank, GTZ, IICA, USAID, the Dutch Aid Programme and the EU through an Italian NGO (CINS). In an attempt to improve coordination, the MoPH
  1. Organises monthly meetings with partners;
  2. Has set up a department to liaise with non-governmental organisations; and
  3. Has produced Guidelines for Development Agencies.

- The MoPH hopes to reach an agreement on a sector-wide approach to development assistance. Partnership between RBM, the Faculty of Medicine and Health Sciences in Sana’a University, the University of Liverpool and other agencies has also been developed.
Partners’ commitment to the development efforts of Yemen is reflected below:
- UNICEF: US$ 53million covering 1999-2001 for basic maternal and child health activities such as EPI, CDD, ARI and malaria control;
- World Bank: US$ 31million for five years from 2000 to support a child development project;
- GTZ: US$ 5million in 2000 as support for the MoPH’s decentralisation plans;
- The Netherlands: US$ 4million per annum with a focus on such sectors as health, water, education and agriculture;
- WHO: US$ 3.77million covering 2000-2001 as support to the health sector;
- European Union: US$ 800,000 for malaria-related activities through an Italian NGO (CINS);
- USAID: US$ 4million to support monitoring of community midwifery services and other health-related actions;
- Austria: US$ 140,000 for support in the area of health economics; and
- Partnership with Naval Medical Research Unit for the reassessment of drug resistance in malaria patients in Yemen was established in May 2000.

Institutional arrangements
- A multisectoral structure is being set up by a Prime Minister’s Decree to spearhead the RBM inception process. The MoPH holds monthly partners meeting to better coordinate actions and activities.

Strategy development
- Situation analysis in two malaria endemic governorates has been completed. A plan of work for one has been completed, agreed by partners and resources have been committed.

Forthcoming actions
- Advocacy campaigns and district level inception meetings.
Armenia

Introduction

Malaria was completely eradicated in Armenia in 1963, and there were no cases until 1994. However, after the collapse of the Soviet Union in 1990, it became impossible to maintain the malaria-free status and 196 malaria cases were reported among military personnel in 1994. In 1995 the number of imported malaria cases increased to 502. In the next year out of 347 cases, 149 were reported as autochthonous.

During 1997-1998, the number of reported cases (imported and autochthonous) continued to rise, and a total of 1,156 cases were reported in 1998. Although 30 out of 81 districts recorded malaria cases, 89 percent of the autochthonous cases were in Masis district in Ararat valley bordering Turkey. The malaria situation started to improve in 1999, when 616 *P. vivax* cases were reported, of which 376 were in Masis.

### Malaria data, 1995 - 1999

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Autochthonous cases</td>
<td>0</td>
<td>149</td>
<td>567</td>
<td>542</td>
<td>329</td>
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<tr>
<td>Imported cases</td>
<td>502</td>
<td>198</td>
<td>274</td>
<td>614</td>
<td>287</td>
</tr>
<tr>
<td><em>P. vivax</em></td>
<td>502</td>
<td>347</td>
<td>841</td>
<td>1156</td>
<td>612</td>
</tr>
<tr>
<td><em>P. falciparum</em></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Mixed infections</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>502</td>
<td>347</td>
<td>841</td>
<td>1156</td>
<td>616</td>
</tr>
</tbody>
</table>

* Imported cases from Sudan and the Congo

Existing problems and constraints

- There is no specialised national malaria control service, and preventive services need to be upgraded.
- Concentration of malaria transmission in areas along the Turkish border.
- Inadequate knowledge and skills of staff on malaria and its control and a shortage of qualified trainers.

Political commitment

- There is strong political commitment. The Armenian delegation participated in Inter-Regional Malaria Coordination meetings in Azerbaijan in 1999 and 2000.

RBM goals

- In the short and mid-term:
  - To reduce the incidence of malaria; and
  - To contain a small-scale outbreak of malaria.

- In the long-term:
  - To achieve interruption of malaria transmission by 2005.

RBM specific objectives

- To build up capacities for early detection and radical treatment of all malaria cases.
- To apply vector control measures (indoor residual spraying in selective foci and mosquito source reduction).
- To improve malaria surveillance with particular emphasis on active case detection in new foci of malaria.
To strengthen the malaria prevention and epidemic control capabilities of the Ministry of Health.

- To apply chemoprophylaxis for special risk groups.
- To promote health education and community participation in malaria control activities

**Partnerships**

- The RBM Partnership is being developed. RBM-related interventions are implemented with the support of UNICEF, WHO, IFRC, WFP, UNDP and the Governments of Italy and Norway. The Armenian Government has asked the World Bank to include malaria control activities into its existing health programme.

**RBM actions**

- A three-year malaria control project was drawn up and submitted to donors for financial support in 1998. During 1998-1999 Armenia carried out malaria control activities such as:
  - training laboratory technicians, practitioners, entomologists, spray men and voluntary health workers;
  - international training and fellowships;
  - diagnosis and treatment of malaria;
  - indoor residual spraying;
  - biological control;
  - environmental management;
  - mass drug administration;
  - operational research;
  - health education;
  - community mobilisation; and
  - provision of insecticides and equipment for indoor residual spraying and drugs and laboratory equipment/supplies.

- A countrywide action plan was drafted for 2000.

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**Azerbaijan**

**Introduction**

- Malaria was practically eradicated from Azerbaijan in the 1960s, and only three autochthonous cases were reported in 1967. However, the situation deteriorated rapidly after 1990, and the number of malaria cases reached 13,135 in 1996. The major reasons were a sharp worsening of socio-economic conditions and the displacement of nearly one million people from war-stricken zones. With international assistance the reported number of malaria cases dropped from 9,911 to 2,315 in Azerbaijan over 1997-1999.

**Malaria data, 1995-1999**

<table>
<thead>
<tr>
<th>Year</th>
<th>Autochthonous cases</th>
<th>Imported cases</th>
<th>P. vivax</th>
<th>P. falciparum*</th>
<th>Mixed infections</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>2,840</td>
<td>-</td>
<td>2,840</td>
<td>-</td>
<td>2,840</td>
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<td>1996</td>
<td>13,135</td>
<td>-</td>
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<td>1997</td>
<td>9,911</td>
<td>-</td>
<td>9,911</td>
<td>-</td>
<td>9,911</td>
<td>9,911</td>
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<tr>
<td>1998</td>
<td>5,175</td>
<td>-</td>
<td>5,175</td>
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<td>5,175</td>
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<tr>
<td>1999</td>
<td>2,311</td>
<td>-</td>
<td>2,312</td>
<td>-</td>
<td>2,312</td>
<td>2,312</td>
</tr>
</tbody>
</table>

* Imported cases from Sudan
Existing problems and constraints

- Sustainability of achieved results in malaria control.
- Water management problems.
- Lack of intersectoral collaboration to implement bio-environmental measures for reducing mosquito breeding sites.

Political commitment

- There is strong political commitment. The country delegation participated in Inter-Regional Malaria Coordination Meetings in Azerbaijan in 1999 and 2000. The country delegation, headed by the Deputy Minister of Health, attended 3rd Meeting of the Global RBM Partnership held in Geneva in February 2000.

RBM goals

- In the short and mid-term:
  - To reduce the incidence of malaria; and
  - To contain a large-scale epidemic of malaria.
- In the long-term:
  - To sustain and consolidate results achieved in malaria control; and
  - To achieve interruption of malaria transmission by 2010.

RBM specific objectives

- To improve the capacity for and access to early diagnosis and adequate treatment of malaria within the primary health care system.
- To promote cost-effective and sustainable vector control.
- To strengthen the capacities of the specialised services of the Ministry of Health.
- To reinforce malaria surveillance and the anti-epidemic response.
- To increase community awareness and participation in malaria control and prevention.
- To strengthen research capabilities.
- To strengthen the institutional capacities of the National Malaria Control Programme and the general health services.
- To enhance intersectoral collaboration.

Partnerships

- The RBM Partnership is well-established. RBM-related activities are being implemented with support of WHO, UNICEF, International Federation of Red Cross and Red Crescent Societies, Médecins sans Frontières-Belgium, UNDP and World Bank. ENI (Italian oil and natural gas company) is supporting a three-year country programme in Azerbaijan.

RBM actions

- The RBM Partnership was established in 1998 with assistance from WHO. In 1999, a three-year malaria control programme was prepared by the Ministry of Health with support from WHO. The programme was launched by the President of the Republic and the Minister of Health.

- During 1998 -1999 malaria control activities were implemented with emphasis on:
  - integrated vector control measures;
  - indoor residual spraying, environmental management, biological control;
  - training (local and international);
  - surveillance system;
  - provision of equipment, supplies, drugs and insecticides; community mobilisation;
  - applied field research;
  - building the institutional capacities of the malaria control programme; and
  - intersectoral collaboration.
Introduction

The malaria situation in Tajikistan deteriorated after 1992 as a result of civil war and socio-economic disturbances and assumed epidemic proportions in the mid-90s. In 1999 a total of 13,493 cases were reported, of which 50 percent were in the Khatlon region. During the last three years owing to intensive malaria control interventions the reported incidence of malaria dropped by more than 50 percent.

However the situation was complicated by the spread of *P. falciparum*, the most potentially lethal form of the disease in the southern part of the country. In the same three years the reported number of *P. falciparum* malaria cases rose from 196 to 335. Re-introduction of malaria transmission and a rise in the reported incidence of *P. falciparum* malaria in the northern part of Tajikistan is now of concern. Despite a significant reduction in the reported incidence of malaria in 1998-1999, the actual magnitude of malaria is thought to be much greater and cannot be reliably assessed on the basis of available data.

### Malaria data, 1995 - 1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Autochthonous cases</th>
<th>Imported cases</th>
<th>P. vivax</th>
<th>P. falciparum</th>
<th>Mixed infections</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>6,103</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>6,103</td>
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<tr>
<td>1996</td>
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<tr>
<td>1997</td>
<td>29,794</td>
<td>-</td>
<td>19,164</td>
<td>187</td>
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<td>1999</td>
<td>13,493</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>13,493</td>
</tr>
</tbody>
</table>

Existing problems and constraints

- Concentration of intense transmission of malaria in areas particularly along the Afghan-Tajikistan border with poor access to existing health services.
- Poor capacities for early diagnosis and prompt treatment of malaria.
- Exophilic behaviour of *An. pulcherrimus* as the principal malaria vector, shortages of insecticides and limited use of antilarval measures.
- Lack of malaria surveillance, particularly at the periphery.
- Lack of communities' knowledge and skills to prevent themselves from getting malaria.
- Limited financial recourses for malaria control.

Political commitment

There is strong political commitment to RBM. The country delegation participated in the sub-regional RBM Inception Meeting in Uzbekistan in 1999. The country delegation, headed by the Minister of Health of Tajikistan participated in the 3rd meeting of the Global RBM Partnership held in Geneva in 2000. The delegation also went to Azerbaijan in order to participate in Inter-Regional Malaria Coordination Meetings held in 1999 and 2000.

Roll Back Malaria goals

- In the short and mid-term:
  - To prevent deaths due to malaria;
  - To reduce the incidence of *P. falciparum* malaria and prevent its spread throughout the territory of the country; and
  - To contain a large-scale epidemic of malaria.
In the long-term:

- To achieve interruption of malaria transmission by 2010.

**RBM specific objectives**

- To strengthen institutional capacities of the national malaria control programme and general health services.
- To build up the RBM partnership.
- To enhance capacity for decision-making related to malaria and its control.
- To improve capacities for and access to early diagnosis and radical treatment of malaria.
- To apply seasonal and interseasonal mass drug chemoprophylaxis.
- To promote cost-effective and sustainable vector control.
- To improve capacities for timely response to and prevention of malaria epidemics.
- To invest in capacity building.
- To reinforce country surveillance mechanism.
- To strengthen research capabilities.
- To increase community awareness and its mobilisation.
- To enhance intersectoral collaboration.

**Partnerships**

- The RBM Partnership is well established. RBM-related activities are being implemented with the support of WHO, UNICEF, ECHO, MERLIN, ACTED, WFP and the Governments of Italy and Japan. USAID and ADB are likely to contribute to malaria control in 2000.

**Actions to Roll Back Malaria**

- An RBM Project document was drawn up with technical support from WHO/EURO and submitted to existing and potential donors in 1999.
- RBM Partnership meeting was held in the beginning of 2000 with various partners and donors involved in malaria control in Tajikistan.
- During 1998-1999 malaria control activities were carried out with particular emphasis on:
  - Indoor residual spraying, biological control, impregnated mosquito nets and environmental management;
  - Early diagnosis and radical treatment of malaria; seasonal and interseasonal chemoprophylaxis; training (local and international);
  - Malaria surveillance;
  - Public education and community mobilisation; operational research, technical assistance from WHO; and
  - Provision of insecticides and equipment for indoor residual spraying, laboratory equipment and supplies including antimalarial drugs.
- An action plan for malaria control was prepared for 2000.
Turkey

Introduction

Turkey began a national malaria eradication programme in 1957 and malaria had almost disappeared by 1968. In 1970, 1,293 cases of malaria were reported, mainly from the south-eastern part of Anatolia.

However from 1971 onwards the number of malaria cases in the Cukurova and Amikova plains increased, reaching alarming proportions in 1976 and 1977, when 30,852 and 115,512 cases were reported respectively. Through concentrated efforts and at considerable cost, malaria incidence began to recede in this area in 1978, and 22,323 cases of malaria were reported in 1979. However, during 1980 the situation deteriorated again with more than 56,000 cases, and this tendency remained unchanged with 66,681 cases in 1983. Since 1990, when only 8,680 cases were reported, there has been another marked deterioration. The number of cases peaked with 84,345 in 1994. During 1995-1999 there was a steady decline, and cases dropped from 82,096 to 20,963.

At present, over 15 million people, or 23 percent of the population of Turkey, are still living in areas where malaria is endemic. Another large proportion (nearly 44 per cent) live in unstable non-epidemic areas where risks of an explosive resumption of focal transmission of malaria remain high.

Malaria data, 1995–1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Autochthonous cases</th>
<th>Imported cases</th>
<th>P. vivax</th>
<th>P. falciparum</th>
<th>Mixed infections</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>81,754</td>
<td>342</td>
<td>82,076</td>
<td>13</td>
<td>7</td>
<td>82,096</td>
</tr>
<tr>
<td>1996</td>
<td>60,634</td>
<td>250</td>
<td>60,863</td>
<td>20</td>
<td>1</td>
<td>60,884</td>
</tr>
<tr>
<td>1997</td>
<td>35,376</td>
<td>80</td>
<td>35,443</td>
<td>10</td>
<td>3</td>
<td>35,456</td>
</tr>
<tr>
<td>1998</td>
<td>36,780</td>
<td>62</td>
<td>36,824</td>
<td>14</td>
<td>4</td>
<td>36,842</td>
</tr>
<tr>
<td>1999</td>
<td>20,905</td>
<td>58</td>
<td>20,950</td>
<td>13</td>
<td>0</td>
<td>20,963</td>
</tr>
</tbody>
</table>

Existing problems and constraints

Concentration of intense transmission of malaria in the south-eastern part of the country with poor access to existing health services;

Insecticide resistance of An. sacharovi as the principal malaria vector, shortages of insecticides and spraying equipment, limited use of antilarval operations and low rate of utilisation of community-based preventive measures, including insecticide-treated mosquito nets.

Poor capacities for early diagnosis and radical treatment of malaria, particularly at the grass-roots level.

Lack of malaria surveillance, particularly at the periphery.

Lack in communities’ knowledge and skills and their participation in malaria-related preventive activities.

Limited recourses invested to malaria control by the Government, national private sector and external donors.

Political commitment

There is strong political commitment. A Roll Back Malaria Inception Meeting, with participation by possible donors, was held at the beginning of 2000 in Ankara. The country delegation headed by the Under-Secretary of the Ministry of Health participated in the 3rd Meeting on the Global RBM Partnership which took place in Geneva in 2000.
**RBM goals**

- In the short and mid-term:
  - To further reduce the incidence of *P. falciparum* malaria; and
  - To sustain and consolidate results achieved in malaria control.

- In the long-term:
  - To achieve interruption of malaria transmission by 2010.

**RBM specific objectives**

- To strengthen institutional capacities of the National Malaria Control Programme and general health services.
- To enhance capacity for decision-making related to malaria control.
- To improve capacities for and access to early diagnosis and adequate treatment of malaria within the primary health care system.
- To promote cost-effective and sustainable vector control measures.
- To reinforce the country malaria surveillance system.
- To strengthen research capabilities.
- To increase community awareness and participation in malaria control.
- To enhance intersectoral collaboration.

**Partnerships**

- The RBM Partnership is being established and the RBM Project is expected to start soon.
- The Government, WHO, UNDP (supported malaria-related activities in past), UNICEF, JICA, EU and GAP Administration will contribute to malaria control in the country.

**RBM action**

- An RBM Project document has been drawn up with technical support from WHO/EURO and was translated into Turkish by the beginning of 2000. The RBM Project is expected to start mid-2000.
- Discussions and negotiations among the Government and possible partners are under way. The Government is expected to cover a major portion of the planned RBM interventions in the country.
Bangladesh

Introduction

- Malaria is a major health problem in Bangladesh with roughly 88 percent of the 125 million population at risk. About 99 percent of cases come from just 13 (out of 64) districts where 25 million people are at risk, with 10 million living in areas with the highest risk. The Hill Tract tribes living in remote areas are the most severely affected.

- More than 150,000 cases and around 550 malaria deaths were once reported annually but reported cases have been declining since 1995. In 1998 only 60,023 laboratory-confirmed cases and 528 deaths were recorded. There was a major epidemic in 1993 but no epidemic has been reported since 1996.

- *P. falciparum* comprises 60 percent of the cases. Foci of *P. falciparum* resistant to chloroquine and also to Sulfadoxine pyrimethamine are present. Local vectors are *An. dirus, An. minimus, An. philippinensis, An. aconitus, An. annularis,* and *An. sundaeicus.* Some vectors are resistant to DDT and malathion.

- The Deputy Director of Malaria & Parasitic Disease Control, who works under the Director of Primary Health Care, has overall responsibility for the country’s malaria control programme, which is integrated with the general health services. Activities include case detection, both active and passive, laboratory diagnosis, treatment and vector control. There is a strong emphasis on early case detection and treatment. Vector control is minimal and DDT has no longer been used since 1993. A South East Asian Region working group recommendation on revised control strategy has been adopted. Strengthening programme management has been given high priority.

RBm action

- Bangladesh participated in the Regional Consensus Meeting organised by WHO-SEARO. Two national advocacy meetings were conducted and attended by representatives from different government agencies, media, NGOs, UNICEF and WHO. Consensus was reached on implementing RBM in 13 districts. Advocacy campaigns were conducted through the media. A short-term consultant, supported by WHO, undertook the national situation analysis and strategic planning in collaboration with national authorities. Situation analysis at district level is going on.

- In an informal consultative meeting on RBM Technical Support Networks in Asia, Chiang Mai, Thailand, in March 2000, three Regional Technical Support Networks in South-East Asia were established. They are:
  - Transmission Risk Reduction (TRR);
  - Drug Resistance and Policy (DRP); and

Bangladesh is represented in these networks, and will establish national chapters.

Political commitment

- The Government supports RBM as expressed during the Health Ministers’ meetings in September 1998 and October 1999, and also during the Regional Committee meeting in July 1999 organised by WHO/SEARO. The Local Government Authorities, particularly in the Hill Tract Districts, are also committed to RBM.

Partnerships

- Numerous partners within the Government, multilateral and bilateral organisations, and NGOs support RBM. UNICEF, UNDP World Bank, several NGOs (e.g. Bangladesh Rural Advancement Committee, CARITAS, WorldVision) have expressed interest and commitment to support RBM in Bangladesh.

Institutional arrangements

- The Ministry of Health is leading the RBM actions.
**Strategy development**

- A consultant in collaboration with the national authorities did the national situation analysis and the strategic directions. Situation analysis at the district level and the development of strategy and plan of work are under way.

**Forthcoming actions**

- Development of the Plan of Action at district level after the situation analysis is completed in August 2000.
- Establishment this year of the national chapter of the Technical Support Networks on SIE, TRR and DRP.

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**Myanmar**

**Introduction**

- Malaria is a major public health problem in Myanmar, particularly in the border areas where forest-related activities take place. Of the total population of about 46.5 million, 60 percent, or 36.8 million, are at risk with 14.5 million living in high-risk areas. The estimated number of clinical cases and deaths per year used to be around 3.5 million and 5,000, respectively. In 1997, there were 480,000 clinical cases, 88,000 confirmed cases, and 2,943 deaths reported. About 85 percent of cases were *P. falciparum*. Multidrug resistance is spreading with resistance to chloroquine and Sulfadoxine-pyrimethamine widespread and reports of resistance to mefloquine and quinine.

- The major vectors are: *An. minimus*, *An. dirus*, *An. jeyporiensis*, *An. philippinensis*, *An. sundaicus*, *An. annularis* and *An. maculatus*. *An. annularis* is resistant to DDT; *An. minimus* and *An. dirus* are exophilic and exophagic.

- Myanmar’s resources and health infrastructure are inadequate in highly endemic and difficult-to-access areas. Uncontrolled population migration into the country's forested areas and across international borders add to the problems in controlling malaria.

- Malaria control is part of the National Health Plan. The national objective is to reduce malaria morbidity and mortality by 20 percent by 2001 with 1996 levels as the baseline. The control strategy is being implemented in line with the Global Malaria Control Strategy and the programme is integrated with the general health services. At national level, the Vector Borne Disease Control Programme, under the Division of Disease Control of the Department of Health, is responsible for technical guidance, planning, monitoring and evaluation of malaria control.

**RBM action**

- Myanmar participated in the regional and inter-country meetings on RBM. A plan of work that is now part of the Mekong RBM Initiative was developed in consultation with the partners.

- In an informal consultative meeting on RBM Technical Support Networks in Asia, Chiang Mai, Thailand, in March 2000, three Regional Technical Support Networks in Southeast Asia were established:
  - Transmission Risk Reduction (TRR);
  - Drug Resistance and Policy (DRP); and

- Myanmar is represented in these networks, and will establish national chapters.

- In July 2000 a Ministerial Meeting between Myanmar and Thailand was held to address health issues, in particular malaria, HIV and TB, along the Thai-Myanmar border. In preparation for this meeting, high-level technical staff from both countries, as well as from WHO met in Myanmar in June 2000.

**Political commitment**

- The Government expressed its support for RBM at the Health Ministers’ meeting in September 1998 and October 1999, and during the Regional Committee meeting in July 1999 organised by WHO/SEARO.

**SEARO Region**
Partnerships

The Government's partners are UNICEF, WHO, UNDP, SEAMEO-TROPMED, ACTMalaria, and the other countries engaged in the Mekong RBM Initiative. In this initiative WHO will provide overall technical backstopping, UNICEF and UNDP will concentrate on developing human resources, improving access to and quality of primary malaria care with emphasis on community-based interventions, promoting ITNs and modern diagnostic tools.

Institutional arrangements

The plan is to have a Project Committee, National Project Manager, RBM Technical Adviser, two National Project Coordinators and five Project Field Officers.

Strategy development

The national strategy and Plan of Action was developed by the national authorities and discussed with some key partners. It is based on the global malaria control strategy and incorporates the principles of RBM. The components are:

- Strengthen the institutional capacities of NMCP and the general health services;
- Build up the RBM partnership and enhance capacity for decision-making related to malaria and its control;
- Improve capacities and access for early diagnosis and treatment;
- Promotion of cost-effective and sustainable vector control;
- Improve capacities for timely response to and prevention of epidemics;
- Strengthen RBM surveillance mechanisms;
- Strengthen capabilities for operations research;
- Increase community awareness and involvement in malaria control and prevention; and
- Enhance intersectoral collaboration.

Forthcoming action

- WHO will soon provide a consultant in Yangon to help the country move RBM forward. Another consultant will be seconded to UNICEF in Bangkok for the Mekong RBM Initiative.
- Establishment of the national chapter of the Technical Support Networks on SIE, TRR and DRP this year.

Nepal

Introduction

- About 70 percent of Nepal's population live in areas with unstable malaria transmission. There were 6,559 reported malaria cases in 1997 but the number of estimated cases was 30,000. Although no deaths were reported, it was estimated that 15 died of malaria in 1997. Outbreaks of P. falciparum have been experienced in the past three years. Chloroquine resistant P. falciparum is present. Treatment failure to the second line drug (Sulfadoxine-Pyrimethamine) against P. falciparum has also been documented in outbreak areas.

- The malaria programme is fully integrated into the general health services with the country stratified according to malaria epidemiology. Guidelines for case management and for prevention/control are in place. Chloroquine is still the first-line drug. ITNs are being piloted in one district (Kavre). Spraying is undertaken in epidemic-prone areas. Some of the major constraints are high turnover of staff and lack of trained manpower, shortage of insecticides and a lack of vehicles for supervision and monitoring.

- There are ongoing collaborative research activities included in the EHP/USAID funded Vector Borne Disease Control Project in Nepal, in which the Centers for Disease Control and Prevention (CDC-Atlanta) is involved. The B.P. Koirala Institute for Health Sciences (BPKIHS/Dharan) is a local partner in research activities.
RBM action

- Nepal participated in the Regional Consensus Meeting organised by WHO-SEARO. The Government submitted a proposal to WHO for the implementation of the first phase of RBM and an RBM Task Force Committee and National Review Team with multisectoral representation have been established. Situation analysis is under way.

- In an informal consultative meeting on RBM Technical Support Networks in Asia, Chiang Mai, Thailand, in March 2000, three Regional Technical Support Networks in Southeast Asia were established:
  - Transmission Risk Reduction (TRR);
  - Drug Resistance and Policy (DRP); and

Nepal is represented in these networks, and will establish national chapters.

Political commitment

- The Government has expressed its support for RBM during the Health Ministers’ meeting in 1998 and 1999, and during the Regional Committee meeting in September 1999, organised by WHO/SEARO.

Partnerships

- Several partners are involved. The RBM Task Force Committee comprises of high-level representatives from: different divisions within the Ministry of Health; Departments of Agriculture, Irrigation, Forest, and Education; UNICEF; UNDP, WHO; World Bank; and Environmental Health Programme (USAID). The National Review Team also comprises representatives from different partners.

- Several existing partnerships in different areas are being tapped for RBM (some are already involved):
  - Direct Malaria Action: WHO, EHP/USAID.
  - Health Sector: WHO, USAID, GTZ, DFID, UNICEF, UNDP, World Bank, JICA, NORAD.
  - General Development: World Bank, UNDP, USAID, ADB, DFID, SIDA, JICA, DANIDA, and NORAD.

Institutional arrangements

- The RBM Task Force Committee was established to provide the overall guidance, monitoring and assessment. It comprises the following:

  RBM Task Force Committee
  Director General, Department of Health Services  Chairman
  Chief/Representative, PPFA&M Division, MoH  Member
  Director/Representative, P&FA Division, DHS  Member
  Director/Representative, NHEICC, DHS  Member
  WHO Medical Officer, WHO  Member
  Director, EHP Nepal  Member
  Representative, Agriculture Department  Member
  Representative, Irrigation Department  Member
  Representative, Forest Department  Member
  Representative, Education Department  Member
  Representative, UNICEF, SARO  Member
  Representative, UNDP, Nepal  Member
  Representative, World Bank  Member
  Director, Epidemiology & Disease Control Division  Member

- The National Review Team was created to conduct the situation analysis and provide recommendations for the development of strategies and the Plan of Action. It is made up as follows:
National Review Team:
Director, EDCD, DHS
Executive Director, VBDRTC
Director, NHEICC, DHS
Rep. PPFA&MD, Ministry of Health
Director, EHP, Nepal
Chief, DCS/EDCD, DHS
WHO Medical Officer, WHO Nepal
WHO Retd. Senior Malaria Adviser
WHO Retd. Malarialogist
WHO Retd. Entomologist
Chairman
Member
Member
Member
Member
Member
Member
Member
Member

Strategy development
■ The situation analysis, spearheaded by the National Review Team, is being conducted to provide the basis of the evidence for the formulation of strategies and Plan of Action.

Forthcoming action
■ The strategy and Plan of Action will be developed after the situation analysis is finished in September 2000. The national chapter of the three technical support networks on TRR, SIE and DRF will be established by the end of this year.

Sri Lanka

Introduction
■ Malaria is a major public health problem due to high morbidity. The cases increased from 142,294 in 1995 to 211,691 in 1998 and deaths increased from five to 115 over the same period. More than 53 percent of cases came from districts with civil strife—Jaffna, Kilinochchi and Mullaitivu in the North-East Province. The districts of Moneragala (Uva Province) and Anuradhapura (North-Central Province) reported 11 percent and 7 percent of Sri Lanka’s total caseload. These two districts share borders with the districts undergoing civil strife. There are about one million refugees in areas with malariogenic potential.

■ The proportion of *P. falciparum* cases ranged from 20 -50 percent of total cases in the districts. There are foci of chloroquine resistance. *An. culicifacies*, the principal vector, is resistant to DDT and malathion. Indoor spraying is poorly accepted. There is a marked shortage of staff to deliver malaria control services. Drug supplies are inadequate and there is no vehicle for control operations.

■ Malaria control has been integrated and decentralised to the general health services since 1989. The provincial government implements the programme. The Ministry of Health is responsible for: formulation of national policy in consultation with the provincial health authorities, technical guidance to provincial programmes, monitoring and evaluation, coordination of training and research and provision of some critical supplies to the provincial programme. Malaria control activities include active and passive case detection and treatment and indoor residual spraying with malathion in selected areas. A South East Asian Region working group’s recommendations on revised malaria control strategy have been adopted.
The budget for malaria control is just 4.1 percent of the total health budget. This is a marked reduction from 14.8 percent before devolution.

**RBM action**

- Sri Lanka participated in the regional RBM meeting organised by WHO. Several meetings were held with the Provincial Directors, Deputy Provincial Directors, and other key staff down to the district level. Guidelines on situation analysis and needs assessment were prepared and discussed at length with concerned staff. Advocacy at national and district level is ongoing. A situation analysis has been completed and strategic planning is progressing. Several partners focus their efforts in areas with civil strife.

- In an informal consultative meeting on Roll Back Malaria Technical Support Networks in Asia, Chiang Mai, Thailand, in March 2000, three Regional Technical Support Networks in Southeast Asia were established:
  - Transmission Risk Reduction (TRR);
  - Drug Resistance and Policy (DRP);
  - Sri Lanka is represented in these networks, and will establish national chapters.

- The Technical Support Group developed five research projects for implementation starting August 2000 with funding support from the World Bank. These projects are:
  - Studies on Drug Resistance;
  - Combination Therapy for Treatment of Drug Resistant Malaria;
  - Computer-based Surveillance System;
  - Study on Impregnated Curtains for Malaria Control; and
  - Water Management for Malaria Control.

**Political commitment**

- The President of Sri Lanka expressed commitment to RBM as early as 1998. The Minister of Health led the Asian Initiative and affirmed Sri Lankan commitment to RBM at the 1998 and 1999 World Health Assembly.

- Sri Lanka's support was again expressed during the Health Ministers' meeting in 1998 and 1999, and during the Regional Committee meeting in September 1999, both organised by WHO/SEARO. The provincial and district authorities have also declared their support for RBM.

**Partnerships**

- There are strong partnerships with multilateral agencies, NGOs, private sector, the media and various government agencies. A WHO National RBM consultant was appointed in September 1999 and now spearheads the movement. A special group was formed to tackle the problems in conflict areas. It comprises UNICEF, UNHCR, OXFAM GB, MSF, Care International, ICRC, SLRCS and FORUT, each of whom nominated a member and agreed to participate in RBM.

**Institutional arrangements**

- An Intersectoral National Action Group with representation from International Organisations, NGOs, the private sector, the media, and several government departments has been established. A Technical Support Group has also been formed with membership made up of representatives from the Ministry of Health, the Anti-malaria Campaign, WHO and the universities.

**Strategy development**

- Five districts where more than 70 percent of cases occur were selected and the situation analysis in these districts was completed in December 1999. The Technical Support Group, in consultation with concerned partners, is developing the strategic plan.

**Forthcoming action**

- A five-year strategic plan is expected to be completed and approved by October 2000. A Plan of Action for 2001 in five districts will be finished and ready for implementation by the end of the year. Five field researches, to be funded by World Bank, will be implemented in August 2000. The national chapter of the Technical Support Networks on SIE, TRR and DRP will be established within the year.
Cambodia

Introduction
- Malaria is a serious problem in Cambodia and about two million of the country's 11.4 million population are at risk. The worst affected are the ethnic minorities, temporary migrants, settlers in forested areas, plantation workers and others who live in the country's hilly forested environments and forest fringes.
- The annual number of recorded cases increased by 90 percent from 105,146 in 1996 to 199,979 in 1998. Malaria mortality decreased from 1,500 in the early 1990s to 621 in 1998. However, malaria still accounts for 20 percent of hospital deaths and in remote villages mortality rates are still very high.
- The increase in reported cases is attributed, not only to improved case detection, but also to other problems. Health services are still weak and there are large-scale population movements as the country undergoes social stabilisation following decades of warfare.
- Outbreaks occur in the refugee camps or resettlement areas. In the west and south-east of the country severe multi-drug resistant *P. falciparum* is present. Importation of antimalarial drugs is uncontrolled and it is suspected that fake artesunate is being sold on the markets.
- Cambodia has implemented a National Malaria Control Programme since 1992 in accordance with the global malaria control strategy. Several partners, including EC, WHO, World Food Programme, UNHCR, EC-Humanitarian Office, UNICEF, UNESCO, a number of NGOs and government agencies outside the Ministry of Health support malaria control. The EC Malaria Control Project includes Cambodia, Lao PDR and Vietnam.

RBM action
- Cambodia is involved in the Mekong RBM Initiative. This was established during a meeting in Ho Chi Minh City, Viet Nam in March 1999 attended by representatives from the Ministries of Health, partner organisations and technical resource networks from the Mekong countries—Cambodia, Viet Nam, Lao PDR, Myanmar, Thailand and China (Yunnan province). The Initiative's goal is to reduce malaria deaths by at least 50 percent of the 1998 level and to substantially reduce malaria morbidity by the year 2010.
- A national RBM meeting with key partners was held in Sihanoukville in August 1999. Under the leadership of the Cambodian Government, joint planning of support to RBM is already taking place among all external partners.
- Ongoing efforts to reduce the malaria burden are being expanded and improved. A facility was established to pre-package anti-malaria drug combinations (mefloquine and Artemisinin) for three-day combination treatment both for the public and private sectors. This facility is now functioning according to international standards for good manufacturing practices. The drug combination blister pack will be registered in September 2000. Its use will be systematically combined with the use of rapid diagnostic tests.
- In remote, forested and hilly areas, free distribution and re-impregnation of mosquito nets and screening and treatment of cases, are being done in collaboration with other programmes such as EPI, Vitamin A supplementation and deworming.

Political commitment
- The Government is committed to RBM. The Prime Minister and his wife, who is President of Cambodia Red Cross, have declared their support for malaria control. As well as the Ministry of Health, other Government agencies are supporting RBM.

Partnership
- Cambodia is active in the Mekong RBM Initiative. This initiative showcases the partnership of Mekong countries. It actively engages existing partnerships involved in malaria control such as SEAMEO-
TROPMED, the Asian Collaborative Training on Malaria (ACTMalaria), the EC Regional Malaria Control Project in Lao PDR, Viet Nam and Cambodia, UNICEF, WHO and other development agencies.

- Within Cambodia the partners of the Ministry of Health are other government agencies (Ministries of Defence, Education and Finance), EC, World Food Programme, UNHCR, EC-Humanitarian Office, UNESCO, WHO, UNICEF, SEAMEO-TROPMED, ACTMalaria and a number of NGOs. There is also a strong partnership with other health programmes such as IMCI, EPI, Dengue, Schistosomiasis, Leprosy, Intestinal Helminth control and Health Sector Reform. A joint Plan of Action outlines major activities and the support being provided or expected from partners.

**Institutional arrangements**
- The programme manager of the National Malaria Control Programme and the WHO medical officer are spearheading the RBM movement.

**Strategy development**
- RBM is building on, expanding and improving the existing malaria control programme that has been credited for the significant reduction of malaria mortality over the past few years. The operational strategies and the Plan of Action are the result of discussion between the partners.

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**Papua New Guinea**

**Introduction**
- Papua New Guinea has a population of 4.4 million (1998 estimate) and more than 700 tribal and cultural groups. It has 20 provinces—five are islands, five in the highland and the rest are along the coast of the mainland. The total land area covers about 183,540 square miles, which are mainly mountainous with some valleys and vast swamps, deltas and forest cover. The economy is dependent on mining, forestry, coffee, palm oil, tea, coconut and subsistence farming. Tourism and petroleum are growing industries.

- The health care services, including malaria control, were decentralised to the provinces in 1983 and to the districts in 1995. However, some districts are not yet capable of absorbing these responsibilities and, with financial grants from the Government, the Churches manage some health centres and Aid Posts.

- Malaria is a major health problem with over 90 percent of the population at risk. The other leading health problems are pneumonia, diarrhoea, TB and malnutrition. HIV/AIDS is a growing concern. Malaria is highly endemic and perennial in the lowlands and in the islands. Epidemics with high mortality occur in the highland valleys. There is no transmission beyond 1,600 meters above sea level.

- The country has a long history of malaria eradication/control with some successes but its gains have not been sustained. Malaria cases increased from 216,000 in 1990 to 1.3 million in 1998. In the same period, the mortality rate remained unchanged at around 14 per 100,000 but the absolute number had slightly risen from 450 to 612. A quarter of these deaths was among children below 5 years old. In spite of the rising trend of cases, the hospitalisation rate due to malaria declined from 11.79 percent in 1990 to 1.86 percent in 1998. The case fatality rate also decreased from 0.18 percent to 0.04 percent.

- About 75 percent of infections are due to *P. falciparum* while the rest are *P. vivax* and sometimes *P. malariae*. Resistance to chloroquine by *P. falciparum* is high. *P. vivax* resistant to chloroquine has been documented but is not believed to be a major problem. For uncomplicated malaria, the first line drugs are chloroquine (or amodiaquine) for three days plus sulfadoxine-pyrimethamine given on the first day. Artesunate is the second line drug. Quinine is for severe cases.

- The main vectors are An. punctulatus, An. koliensis and An. faruati. Insecticide resistance is not yet a problem.

- The major malaria control activities are case detection and treatment, use of ITNs, and indoor residual spraying using DDT in epidemic-prone provinces. Case detection is based mainly on signs and
symptoms. The microscopy service is either poorly developed and sparingly utilised, or non-existent at all in some health centers. Only around 170,000 slides were examined annually with a 10 percent positivity rate.

- The use of insecticide-treated mosquito nets for malaria control was institutionalised after successful field trials in 1986 - 1988. Several years ago the Government had distributed bed nets through health workers with cost recovery but the scheme had little success. Since 1997 distribution and cost-recovery is being done by the Rotarians Against Malaria and there are indications that it is now successful.

**RBM actions**

- RBM was discussed during the national meeting attended by the provincial malaria supervisors, technical staff of the malaria control programme, the Secretary of Health and other key staff of the MOH, as well as representatives from partner agencies (UNICEF; ADB, AusAID, WHO and other government agencies.) RBM was featured during the Health Expo in May 2000. A preliminary assessment of the health services and the malaria situation was done and a detailed situation analysis in two provinces is ongoing. The existing malaria control programme is being strengthened and epidemic preparedness in the highland provinces is being improved. The implementation of the new drug policy is underway.

**Political commitment**

- The Secretary of Health and other senior staff have expressed strong commitment to RBM, which in this country it means Rausim Birua Malaria (Get Rid of Malaria Burden). The Governors in Western Province and in Milne Bay, the Provincial Health Advisors in these provinces as well as in the Eastern Highland committed to support to Rausim Birua Malaria. Support from the Prime Minister is expected soon.

**Partnerships**

- The partners of the Government in the provision of health care services including malaria control are the churches, Asian Development Bank (ADB), Australian Agency for International Development (AusAID), Rotarians Against Malaria (RAM), the private corporate sector (mining and plantation companies), UNICEF and WHO. Within the Government, the schools and the military establishment are involved in malaria control.

**Institutional arrangements**

- The Ministry of Health, with active support from WR’s office is spearheading the RBM movement. The Technical Adviser for Malaria at the MOH and the WHO Medical Officer are the focal points.

**Strategy development**

- A preliminary assessment was carried out in April 2000 by the Technical Advisor in Malaria, MOH, WHO staff from the country, WPRO and HQ. Strategic directions were outlined and discussed with the Secretary of Health and other senior officials at the MOH, WR, the UNICEF country representative, and AusAID. A national situation analysis, based on available data, was carried out recently by the MOH technical staff and by the WHO Medical Officer in PNG. A detailed situation analysis in two provinces will be done soon to provide the basis for the development of the implementation strategies and Plan of Action.

**Forthcoming actions**

- Development of implementation strategies and Plan of Action based on the situation analysis.
- Development and implementation of a scheme for the distribution and treatment of 67,000 bednets recently procured by WHO.
- Inclusion of RBM activities in school health promotion programmes.
- Declaration of 2001 as RBM Year in Papua New Guinea. RBM will be the theme for the National Health Conference in 2001. It will also be one of the main agenda items during the South Pacific Ministers of Health Meeting to be hosted by the Government of PNG in March 2001.
Philippines

Introduction

- The Philippines once had a successful nation-wide anti-malaria campaign but its gains were reversed after the programme was decentralised and integrated into the general health services in 1982. By 1987, the malaria morbidity rate had risen to 221 per 100,000 population, which was similar to the levels in the 1950s.

- The morbidity rate was gradually reduced to 69 per 100,000 population in 1998. This could be attributed to:
  - Re-structuring of the National Malaria Control Programme in 1987;
  - Support from the World Bank through the Philippine Health Development Project (1990-1995) in which malaria control was a major component;
  - The implementation of the programme based on the Global Malaria Control Strategy starting in 1993;
  - The active participation of Local Government Units (LGUs); and
  - Support from the Barangay (village) Health Workers, some NGOs and the private corporate sector.

- Although malaria is still one of the ten leading causes of morbidity in the country, the mortality rate has been reduced significantly and has remained low at less than three per 100,000 population during the past 30 years (0.9 per 100,000 population in 1995). However, malaria death rates are still high in some provinces.

- Malaria is endemic in rural areas, mainly in places where poverty, difficult access to health care, and to some extent political unrest, prevail. Around 10.5 million people (seven percent of the total population) live in endemic areas. The high-risk groups are the indigenous tribes, upland subsistence farmers, forest-related workers, and settlers in frontier areas.

- Twenty-two of the country's 79 provinces have contributed more than 80 percent of cases since 1993. These provinces are in Regions CAR, 2, and 4 in Luzon and ARMM, CARAGA, 9, 10, and 11 in Mindanao. Thirteen provinces, mainly in the central part of the country, have had no indigenous case for several years now. The remaining provinces have only few isolated foci.

- *P. falciparum* comprises around 70 percent of cases, and the rest are *P. vivax* and rarely *P. malariae*. Chloroquine resistance, mainly at RI level, has been documented since the 1970's. In vitro resistance to Sulfadoxine-pyrimethamine and quinine is also present. Chloroquine is still the first-line drug for uncomplicated malaria.

- Over the past five years the national budget for MCP has declined but LGUs have provided some logistics. The current major external source of support comes from the Japanese Grant Aid for Child Health for a malaria control project in three provinces, and also from AusAID.

- Health services in the Philippines were devolved to LGUs in 1993 but the malaria control programme was retained within the Department of Health under the national government. The Department of Health is now re-engineering itself to become more responsive to its roles and the Malaria Control Service will be merged with other communicable disease control programs.

RBM action

- After the launch of RBM by the Director General of WHO in 1998, the Malaria Control Service made a point of advocating RBM in various occasions including:
  - A consultative meeting with the regional and selected provincial malaria control programme coordinators in 1998;
  - International Training Course on Basic Malariology in February 1999;
  - National Malaria Congress in June 1999 that was attended by key officials of the DOH, provincial governors, mayors, provincial and municipal health officers, the WHO Regional Malaria Adviser, researchers and others; and
  - Consultative meetings with LGUs and barangay (village) health volunteers in Region 11.

- RBM initially commences in Region 11 in Southern Philippines. WHO has provided an APW (agreement to perform work) for a situation analysis and development of the strategic plan. Concerned officials of the Department of Health at central and regional offices, the LGU along with barangay officials and health volunteers in Region 11 were consulted for the development of strategic and implementation plans.
**Political commitment**

- The Department of Health considers malaria control to be one of its priority programs and supports RBM. The LGUs have also passed resolutions to support RBM by providing some logistics.

**Partnerships**

- The partners are the Department of Health, LGUs, the Federation of Barangay Health Workers and WHO. This partnership will be broadened to include other government agencies, the media, NGOs, agro-industrial companies, research institutions, and multilateral and bilateral development agencies.

- WHO/WPRO has already committed US$ 135,000 to support the plan's implementation. LGUs will provide additional manpower and funds.

**Institutional arrangements**

- The Malaria Control Service, working in collaboration with the DOH-Regional Health Office No. 11, is currently the focal office.

**Strategy development**

- A strategic plan was formulated after the situation analysis and consultations with officials from the Department of Health at central office and in Region 11, LGUs and barangay officials and health volunteers in Region 11. An implementation plan for three municipalities has recently been developed. The major emphasis is on community participation in early diagnosis and treatment, and the use of ITNs.

**Forthcoming actions**

- RBM will be launched in the province of Davao Norte in August 2000 which marks the start of the implementation of the RBM plan. Before the end of the year, four key health staff from the LGUs and two from the DOH-Regional Office No. 11 will observe a successful community-based malaria control programme in Sabah, Malaysia. Their visit will be made possible through fellowships to be provided by WHO/WPRO.

- Training in the following areas will be conducted:
  - Malaria microscopy for Barangay Health Workers (September 2000);
  - Practical malariology for Municipal Health Officers, Municipal Malaria Coordinators, and other key staff (October 2000); and
  - Orientation in malaria control for Rural Health Midwives and Barangay Health Workers (October/November 2000).

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**Viet Nam**

**Introduction**

- The malaria situation in Viet Nam has significantly improved over the past eight years. From 1991 to 1998, clinical cases dropped from 1.09 million to 383,341 and confirmed cases from 187,994 to 72,091. During the same period, severe cases were reduced from 31,741 to 1,447 and there was a very significant decline in deaths from 4,646 to 183. Around 70 percent of cases were *P. falciparum*. Resistance to chloroquine and Sulphadoxine-pyrimethamine is a serious problem.

- Of Viet Nam's 71.6 million population, 41.9 million are at risk with 15 million living in endemic areas. The high-risk groups are the ethnic minorities who live in forest areas and the migrants who venture into these areas.

- The major malaria control activities are: implementation of ITNs with 11 million population covered in 1998; indoor residual spraying protecting 2.63 million; and early diagnosis and effective treatment.

- Viet Nam's remarkable achievements in reducing malaria morbidity and mortality were due to the ongoing malaria control programme which has strong support from the Government and its international partners. The programme is directed by a national steering committee chaired by the Vice-
Minister of Health and the National Institute for Malaria, Parasitology and Entomology is responsible for the day-to-day management of the programme. At the district level, specialised malaria functions are integrated with the other preventive services in the District Team of hygiene, epidemiology and malaria.

- The EC Malaria Control Project in Cambodia, Lao PDR and Viet Nam provides significant input to the programme.

**RBM action**

- The Government hosted the inter-country inception meeting in March 1999 for the Mekong RBM Initiative. Since then, a series of activities have led to the development of a Plan of Action.
- Current efforts to reduce the malaria burden are being expanded and improved. A new curriculum for village health workers/volunteers was recently developed. It includes malaria and other health problems in remote areas.
- With support from EC Regional Malaria Control Project a working group on border malaria is active in five provinces. It carried out surveys in 1999 to identify problems to help design work plans and to optimise civilian-military cooperation in malaria control activities in border areas.
- A randomised blinded trial to assess the efficacy of five insecticides for bednet treatment has been finalised.

**Political commitment**

- The political support to reduce the malaria burden in recent years has been, and still is, very strong. The Government’s overall objectives are to reduce morbidity and increase the health status and life expectancy of the population, and to ensure equity in and improve the quality of health care. The Government increasingly gives priority to activities for strengthening the health services (including the private sector) particularly in endemic areas.

**Partnerships**

- Strong partnerships have been formed within the country and at inter-country level. In March 1999 the Government hosted the inter-country inception meeting for the RBM Mekong Initiative, which involves the countries of Vietnam, China (Yunnan province) Lao PDR, Myanmar, Cambodia, Thailand and their partners.
- The existing major partners and their support are: GTZ (US$ 500,000), Belgium (US$ 2,625,000), AusAID (US$ 8,200,000), PATH and Viet Nam Health Alliance (US$ 182,000) World Bank (Loan) (US$ 28,800,000) and EC (US$ 15,200,000).
- Several projects will soon end. It is expected that their success will encourage more partners to invest.

**Institutional arrangements**

- The National Institute of Malaria, Parasitology and Entomology holds regular meetings with partners. UNICEF provides support for IEC, strengthening of the district health system and community mobilisation while WHO provides technical support.

**Strategy development**

- The strategy and Plan of Action, which were developed in consultation with the partners, focus on the reduction of the malaria burden in selected high-incidence districts, mainly by improving early detection and treatment. The main strategy is the strengthening of the Village Health Workers (VHW) network, so that it can:
  - Act as an interface between communities and the health system;
  - Provide correct diagnosis and effective treatment;
  - Fill the access gap; and
  - Support communities in implementing effective family practices at household level to prevent malaria.
- Following discussions with RBM partners in the country, UNICEF and WHO’s joint activities are oriented towards:
  - Increasing access to adequate diagnosis and clinical care in remote areas and for disadvantaged populations;
  - Establishing standards for early diagnosis and treatment; and
  - Increasing the coverage of a combination of treatments in falciparum malaria areas.
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