

Chapter 2

Roll Back Malaria to Date

This chapter reviews the experience of RBM from its inception in 1998 until today, describing both significant achievements and major weaknesses. The chapter ends with an overall assessment of whether RBM was needed in the first place, whether it is still needed, and whether it is well placed to achieve its goals in Phase II.

In addition to conducting extensive interviews and field visits in three countries, the Team consulted secondary materials (published documents and reports, scientific articles, and previous evaluations) to generate these findings. Though comprehensive, the evidence gathered by the Team was not all-inclusive. For example, the countries selected for field visits were not randomly selected, but were chosen on behalf of the Team by the 'core' partners. The snapshot of RBM that resulted may have looked somewhat different had the Team visited a different selection of countries or regions in which RBM is active, or interviewed a different set of interested parties. However, the Team was struck by the degree of consistency reflected in the various sources used as evidence and across the technical areas studied. The Team was further impressed by the confirmatory comments received from reviewers on the draft report circulated in early Spring 2002.

2.1 Achievements in Phase I

Phase I is mainly about preparing for impact. Appropriately, therefore, the main achievements of Phase I have been in enhancing commitment, building strategic and technical consensus, and mobilizing resources. There have also been some achievements at the country level.

2.1.1 Enhanced Commitment

The most significant accomplishment of Phase I has been that the world has embraced the problem of tackling malaria with renewed vigour and optimism. Against great odds, the Roll Back Malaria movement successfully mobilized the collective efforts of the international agencies, bilaterals, the NGO community and others to promote a 'can-do' attitude that represents a sea-change in perspective compared with the fatalism of just a decade before.

With the Abuja Declaration in April 2000, the Roll Back Malaria movement gathered steam, having obtained political commitment at the highest level for confronting the problem of malaria in Africa. The success of the Abuja Summit was followed quickly by a pledge of the G-8 following the Okinawa Summit in July 2000, to reduce the burden of disease associated with malaria by 50 percent by the year 2010. These events were accompanied by the UN General Assembly's declaration of 2001-2010 as the Decade of Malaria, and the announcement of the Millennium Development Goals. The momentum galvanized by RBM helped bring malaria to the centre of attention of the international community, creating greater awareness of malaria as a leading killer of the world's poor. Without RBM's existence, it is possible that malaria would not have been included as one of the three diseases targeted by the newly launched Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund).

2.1.2 Building Consensus

RBM has played a major role in generating a broad consensus among partners around a four-part strategy to organize malaria control activities. Thus, partners are now committed to concentrating their efforts on:

- ❑ **prevention, with a special emphasis on insecticide-treated nets (ITNs);**
- ❑ **rapid diagnosis and treatment**, including the adoption of agreed-upon and coherent drug-use guidelines to provide effective care, reduce transmission and slow the development of resistance;
- ❑ **treatment of pregnant women**, in order to improve their health and the health of the newborn (referred to as Intermittent Preventive Treatment, or IPT); and
- ❑ **rapid response to malaria epidemics**, in areas with unstable malaria.

The consensus includes the conviction that this four-part strategy, if properly applied, can indeed roll back malaria.⁷ This is a remarkable achievement, particularly in light of the scepticism that continues to exist in some circles around whether or not the appropriate tools exist to reduce the burden of malaria in areas of high transmission. In addition, consensus has been developed concerning more detailed issues lying within each element of the strategy; for example, concerning scaling up ITN programmes in Africa.⁸

In addition, there have been significant technological advances over the past few years in which RBM has played an important role. These include the development of long-lasting insecticide-treated nets, blister packs to improve treatment effectiveness and compliance, and the identification and increased use of new combination drug therapies.

RBM has also played a role in promoting progress and consensus in other, sometimes difficult, areas. Notably, RBM has successfully lobbied for the lowering of taxes and tariffs on net imports in 17 African countries (Box 1 and Figure 2). RBM was also instrumental in achieving an outcome in the DDT controversy which would not be detrimental to the interests of malaria-endemic countries (Box 2 – see page 15).

2.1.3 Resource Mobilization

Growing political commitment and awareness has been accompanied by an increase in the amount of overall resources available for malaria worldwide. Prior to the launch of RBM, total international spending on malaria was approximately \$67 million per year. By the year 2002, this figure had grown to \$130 million, a two-fold increase. Resource mobilization is discussed at greater length in Section 2.4.

2.1.4 Progress at the Country Level

Progress with malaria control at the country level during the first few years of RBM has been positive but limited. In part, this is as expected, given the enormous emphasis that RBM has placed in the early years on increasing awareness, mobilizing resources and generating technical consensus. In most countries RBM is a known entity and has certainly increased the level of interest in and support for malaria control.

⁷ An excellent source for the evidence behind the four-part strategy is provided in *The Evidence Base for Interventions to Reduce Malaria Mortality in Low and Middle-Income Countries*, by Meek, Hill and Webster and produced as part of the Commission on Macroeconomics and Health. Working Paper Series (September 2001).

⁸ See *Scaling Up Insecticide-Treated Netting Programs in Africa: A Strategic Framework for Coordinated Action*. (RBM, 2002)

Box 1

Taxes and Tariffs

The high cost of insecticide-treated nets (ITNs) is one of the critical barriers to their widespread use, and taxes and tariffs contribute significantly to that cost. Over the past three years, seventeen countries¹ in Africa south of the Sahara have either reduced or eliminated taxes and tariffs on the importation of mosquito nets, netting material and insecticides. The successful adoption of these reforms by some countries, and the continued advocacy on behalf of these policies throughout Africa and elsewhere, has been one of the key achievements of Roll Back Malaria in Phase 1.

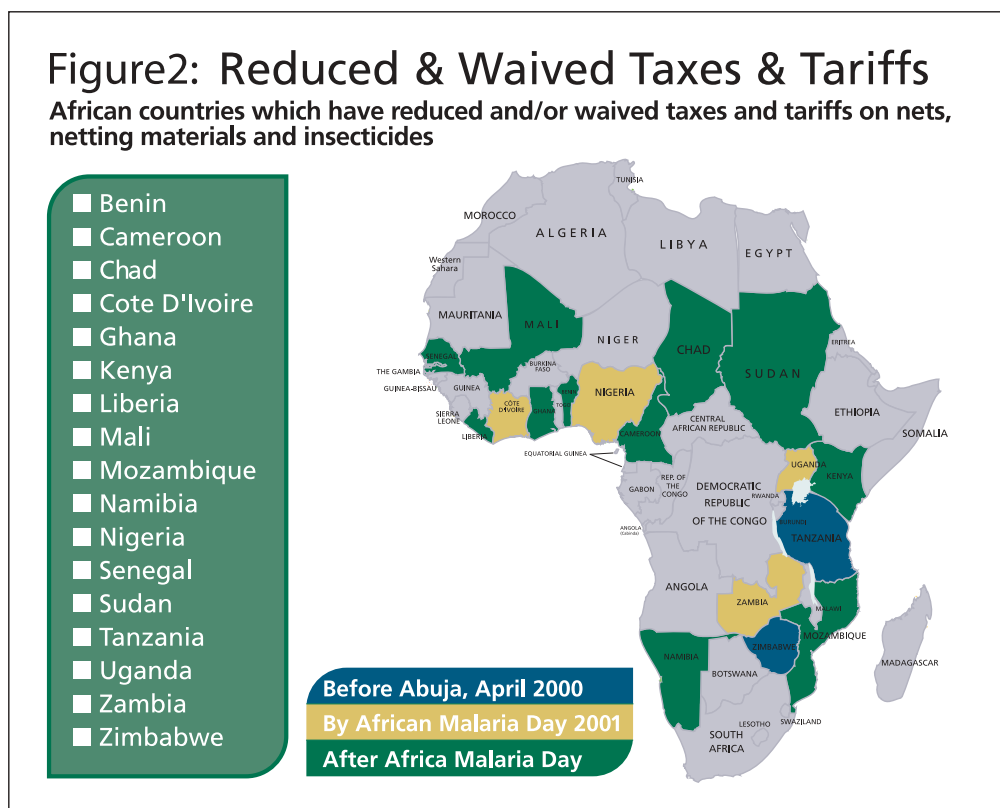
The need for reform in these areas was well known prior to the launch of the RBM Partnership. However, RBM has been able to add impetus and urgency to what might have been a painstakingly slow and low-profile process of reform undertaken independently by countries in the region. The substantial progress that has occurred within the relatively short period of time since the Abuja Summit in April 2000 was made possible only through the collaboration of RBM Partners.

RBM continues to monitor the impact of reforms in countries which have elected either to eliminate or reduce taxes and tariffs on ITNs and other products, and also continues to advocate for reform in other countries. Highlights of activities undertaken heretofore include:

- ❑ Development of an evidence base to support policy dialogue, promoted by the NGO community, academic researchers, and bilateral and international agencies.
- ❑ Continued discussion of the evidence base at international and regional meetings, contributing to a growing awareness that reduction or elimination of taxes and tariffs on ITNs is a worthwhile policy goal for all countries in the Africa region.
 - RBM Partners worked together to place a "call for the elimination of taxes and tariffs on ITNs" in the record and proceedings of the World Trade Organization (WTO) summit held in Seattle, Washington, USA in 1999. The call was made on behalf of the Southern African Development Community (SADC) by the Honourable Representative of Tanzania.
 - The Declaration of the Abuja Summit, signed on April 25, 2000 by 44 African Heads of State or senior representatives, included the following resolution: "To take immediate action to reduce or waive taxes and tariffs for mosquito nets and materials, insecticides, anti-malarial drugs and other recommended goods and services that are needed for malaria control strategies."
- ❑ Various RBM partners have worked to disseminate information on the barriers posed by taxes and tariffs to widespread use of ITNs and the potential benefits of eliminating them. Target audiences include health, economic, trade and foreign policy specialists.
- ❑ Policy dialogue and policy reform were successfully taken forward in Tanzania providing a case study for RBM Partners and an example for other African nations.
- ❑ The First Africa Malaria Day (AMD1) took place on April 25, 2001, providing the occasion to take stock of the status of implementation of the Abuja Declaration. The RBM Secretariat released a report it had commissioned on the status of tax and tariff policy. Also, several countries announced a policy change and/or signed legislation reducing or waiving taxes on ITNs.
- ❑ The effort is ongoing. RBM Partners continue to draw attention to the status of tax and tariff reforms and to encourage reforms in countries that have not yet made them. The RBM Partners also support market surveillance to determine the impact the reforms are having on price and use of ITNs.

Continued progress is needed to ensure that reductions in taxes and tariffs are large enough to allow commercial partners useful access to markets. By this measure, a more sobering estimate of the number of countries following through on the Abuja declaration is seven to ten.

¹ Benin, Cameroon, Chad, Côte d'Ivoire, Ghana, Kenya, Liberia, Mali, Mozambique, Namibia, Nigeria, Senegal, Sudan, Tanzania, Uganda, Zambia, Zimbabwe.



In the countries of South-East Asia, including Cambodia, Thailand and Vietnam, malaria control was in relatively good shape prior to RBM and probably would have continued to develop and have impact whether RBM was created or not. However, those involved in these achievements are quick to point out that since the creation of RBM they have received more support and greater legitimacy. RBM has enabled these already successful countries to do better and faster what they would have done anyway. These comments also apply to Latin America.

In Africa RBM has built upon AIM and created increased momentum and commitment at the country level. This commitment and activity is not yet adequate, but it has undoubtedly increased since 1998. For African countries that had become despondent about malaria, RBM has provided a rallying call and a legitimacy. In the health field, one is no longer a crank if one calls for a major effort to control malaria. In finance and planning, one can refer to an international consensus in calling for increased investment in malaria control. Among the donor offices in African countries, it is widely known that many donors have committed globally to giving increased emphasis to malaria control.

RBM has worked with individual African countries to complete 15 Country Strategic Plans (CSPs), with several more in the pipeline. RBM has also increased and strengthened the availability of technical support on which countries can call. This increase is evident at WHO in Geneva, at AFRO in Harare, and through reliance on Inter-Country Teams to provide technical support to groups of countries in sub-regions of Africa.⁹

⁹ AFRO formed four Inter-Country Teams in 1997. Two are operational – one in Harare for ten countries in Southern Africa, and one in Kampala for seven countries in East Africa. Two others are not fully staffed – one in Libreville for seven countries in Central Africa and one in Lome for 16 countries in West Africa plus Algeria. Among these, the Southern Africa Malaria Control (SAMC) team has proven especially effective.

Box 2

The DDT Controversy

In 1999 the RBM Secretariat was called upon to help resolve a controversy emerging from intergovernmental negotiations to establish an international environmental treaty. At the centre of this controversy was DDT, former hero of the malaria eradication campaign and current totemic villain of the environmental movement. The treaty being negotiated was intended to eliminate the production and use of twelve persistent organic pollutants. DDT, still used for malaria control in over 20 countries, was included among 'the dirty dozen' chemicals slated for elimination, eliciting a strong reaction from public health activists and malaria specialists who claimed that its elimination would result in unacceptable increases in malaria morbidity and mortality. Environmental specialists and others claimed that environmentally friendly alternatives to DDT, although more expensive, could easily be deployed to guard against such a negative impact.

The controversy over the role of DDT in malaria vector control and the dangers posed to the environment escalated and attracted considerable media attention. The controversy was perpetuated in part because of a relatively weak evidence base on the human toxicity of DDT, the cost-effectiveness of proposed alternatives, and the probable impact of public health use of DDT (compared to agricultural use) on the environment. Resolution was also hampered by the relative lack of public health expertise among the Intergovernmental Negotiating Committee delegates, who were primarily active in the fields of foreign and environmental policy.

The challenges presented to the RBM Secretariat in responding to the controversy were many and varied. They included: evaluation of the evidence base and the drafting of policy guidance (a WHO normative role); a major communications effort; and the establishment of new cross-sectoral partnerships and working relationships. In the process, RBM formed new and highly effective 'partnerships' or 'working relations' with the United Nations Environment Programme (UNEP), the US Environmental Protection Agency, the environmental policy apparatus of core RBM partners, as well as a variety of health and environmental NGOs. RBM conducted country and informal expert consultations and convened and chaired a special working group on DDT which was able to establish a position on the use of the insecticide in public health and the process for evaluating and moving to alternatives. The weight of WHO's technical authority contributed greatly toward establishing the credibility of the working group. Information about the treaty negotiations and the WHO position on DDT was disseminated to health specialists via the WHO regional networks and to treaty focal points via UNEP. The RBM Secretariat led the WHO delegation to all meetings of the Intergovernmental Negotiating Committee and prepared information and media events for each, supporting the participation of health/malaria specialists from a number of countries. The RBM Secretariat also served as the media focal point on malaria and DDT and provided interviews and information to all major media, as well as presentations to professional meetings and interest groups.

RBM's objectives throughout this process were:

- to establish consensus on the present and future role of DDT and alternatives in malaria control;
- to encourage greater involvement of public health specialists in country-level discussions about the treaty and in country delegations to the negotiating sessions;
- to provide information to negotiators and others that would reduce controversy and result in a win-win situation for public health and the environment (in which the longer term goal of DDT elimination is achieved through strengthened, more robust malaria control);
- to benefit from the media attention to inform the public about malaria; and
- to mobilize resources to support malaria control from outside the health sector.

All of these objectives have been met and the final treaty, known as the 'Stockholm Convention on Persistent Organic Pollutants' provides for the continued public health use of DDT and international assistance for the development and implementation of alternatives.

Resources to support the initial work of the RBM Secretariat were provided by environmental agencies/offices. In addition, the Pan American Health Organization (PAHO) and the WHO Regional Office for the Americas (AMRO) and most recently the WHO Regional Office for Africa (AFRO) have been awarded project development grants from the Global Environment Facility (GEF) to promote regional efforts to strengthen malaria control and reduce reliance on DDT.

2.2 Under-performance in Phase I

The Evaluation Team found that weaknesses in the global and regional structures of RBM have contributed to a failure to get activity fully underway at country level in Phase I. The source of these weaknesses, and a description of their impact on malaria control activities at the country level, are reviewed in this section.

2.2.1 The Global Level

Partnership

At the global level, partners remain committed to the concept of RBM and to the global priority of reducing the economic and social burden caused by malaria. All expressed a desire to move forward optimistically and to make the Partnership work better. However, the Evaluation Team found dissatisfaction and frustration concerning the RBM Partnership among all partners, and a shared sense that the Partnership worked better in the early days of RBM and has deteriorated more recently. It is widely believed that the RBM Partnership requires revitalization and re-engineering in order to achieve its goals.

All partners expressed a healthy degree of self-criticism. They volunteered to the Evaluation Team areas in which they felt they could perform better, and acknowledged the validity of adverse comments made about them by other partners. The Evaluation Team was encouraged by this sense of commitment to the future, and the apparent willingness to make changes in the RBM Partnership which would ensure greater effectiveness.

Management

RBM had been hindered by management changes at the top of the RBM Secretariat and Cabinet Project at WHO in Geneva. Since the launch of RBM three years ago, there have been four different senior managers, with delays and uncertainties between these appointments. This degree of management and leadership change is bound to affect performance. Stable leadership is required.

Structure

When RBM was created, a decision was taken to make the Partnership loose and somewhat informal. The argument was that this would encourage a strong participatory approach. Organizations wishing to make a contribution would be free to become partners and no one would feel excluded. The Partnership was seen as an organic entity; changing in its membership through time in response to circumstances and encouraging maximum engagement from the maximum number of actors. This model undoubtedly had appeal, and may have been responsible for the early success of the Partnership in raising commitment and moving so quickly to the Abuja Summit. Today, those involved in RBM, and particularly the core partners, unanimously feel that this model is not appropriate as RBM moves forward.

First, it is not clear who the partners are or what partnership means. There is talk of core partners, with the implication that they are particularly important to the success of the enterprise. Core partners are not defined specifically, and their roles and responsibilities are not clear. This looseness and uncertainty is confusing to the partners themselves; it allows the partners to avoid responsibility and to put blame on others; and it is also confusing to clients at the country level.

The most damaging effect of this loose Partnership has been that in practice partners yield most of the responsibility for RBM to WHO, and then blame WHO for what goes wrong. WHO has housed the Secretariat for the Partnership; WHO has been the home of the large team of RBM professionals dealing in a wide range of RBM subject matter; WHO is seen as the organization that has got to make things work and fix things that go wrong. This is unhealthy. In addition, this

structure has made RBM appear more and more like a WHO programme with friends, rather than a true partnership of equals, all of whom are committed to specific roles and responsibilities.

This structure has also encouraged a culture of ‘going it alone’ within WHO. Decisions may be taken without consulting the other partners. Requests for information and clarification from the other partners may go unanswered. The value of fully involving the other partners is not always perceived.

Although RBM was originally designated a ‘Cabinet Project’, the significance of this special status has been lost over time. RBM is increasingly viewed as ‘just another’ WHO programme. This perception is linked historically to the combining of the technical functions (i.e. WHO contributions as one partner within the RBM Partnership) with the Secretariat functions which serve the Partnership as a whole. These two distinct functions are both reporting to the same manager and, to some degree, have been intermingled. This manager used to report to the Director-General under the previous Cabinet Project status of RBM. Now this manager reports to an Executive Director within WHO, further reinforcing the perception of ‘just another’ programme.

Governance

Closely linked to the structural and organizational issues raised above is the question of governance. RBM has no governance structure. This further reinforces the impression that it is a WHO programme with friends and encourages a business-as-usual culture within WHO. It puts the other partners in a difficult position. If they have suggestions to make about RBM operations, or matters that they would like to see changed, they have no avenues other than a friendly chat with the RBM manager. There is no forum in which difficult issues can be collectively resolved to the satisfaction of all core partners.

The periodic Partners’ Meetings do not substitute for a formal governance structure. They are not decision-making occasions; membership rights at Partners’ Meetings are ill-defined; and the roster of those who attend changes from meeting to meeting. The Partners’ Meetings certainly provide an opportunity to raise issues and propose solutions, but partners leave the table with no clarity concerning what precisely was agreed and what steps will now be taken by the Secretariat.

Private sector

RBM has given considerable importance to private sector participation in the Partnership. This participation has mainly involved large corporations and either research and development projects or donations in-kind. For example, Exxon has recently agreed to provide nets and treatment to families living within a certain distance of the gas pipeline under construction in Cameroon. Similarly, important collaborations are underway with the pharmaceutical industry concerning the development of new combination therapies and with other industries concerning long-lasting treated nets. This emphasis overlooks an equally important role of the private sector in small-scale production and service delivery at the country level. The External Evaluation Team found little evidence that the Secretariat was sufficiently aware of this potential or sufficiently active in promoting these opportunities at the country level.

Technical Support Networks

In the original design of RBM in 1998, it was envisaged that Resource Networks would be created. There were to be two kinds of Resource Networks: networks that provided direct support to control operations and networks that addressed specific technical issues that are critical for control policy. In the first category, the following specific Resource Networks were envisaged:

- needs assessment and intervention at district and national level;
- prevention and control of malaria epidemics; and
- malaria control in complex emergencies.

In the second category, the following networks were outlined:

- improving quality of care in the home;
- quality and provision of anti-malarials at the local level;
- implementation of insecticide impregnated bednet programmes;
- geographical mapping of malaria and health care;
- financing, economics and sector-wide approaches; and
- monitoring of resistance (drugs, insecticides).

In one early formulation it was envisaged that malarious countries would be given budgets of approximately \$200,000 in order to purchase support from the Resource Networks.

The concept of Resource Networks gradually changed into the concept of Technical Support Networks (TSNs). These TSNs are seen by most partners as performing poorly, and there is uncertainty concerning their role, organization and precise purpose. Only four TSNs are active; those on complex emergencies, epidemic control, drugs and insecticide-treated nets. The TSNs have merged, or been unclear about, the distinct roles of standard setting and direct support to countries. In practice, they have concentrated more on the former, and may be poorly equipped for the latter.

Technical support is needed not only by countries but also by partners and agencies that are assisting countries. Most partners cannot mobilize the in-house expertise, such as that embodied within WHO, and need assistance in guiding their staff concerning the latest and most appropriate technical approaches.

It has also been emphasized that the technical support needs of RBM include not only traditional areas in malariology and public health, but, increasingly, skills in social marketing, management, strategic planning and financing.

2.2.2 The Country Level

The External Evaluation Team found that the RBM impact in Phase I at the country level has been suboptimal, with a few notable exceptions. Where progress is taking place, it is generally the case that it had begun prior to RBM. It seemed that global and regional processes had had little impact on national malaria programmes, overall, at least in countries visited by the Evaluation Team. This section provides examples of under-performance observed at the country level. Supporting evidence in the form of telling quotations from the telephone interview survey (Green, 2002) commissioned by 'core' RBM partners is presented in Box 3.

Low priority

It was not possible to assess the situation across all of Africa in the brief amount of time available to the Evaluation Team, but in the two African countries visited, malaria is still afforded a shockingly low priority within the national government and the health sector as a whole. In Tanzania, a country where RBM has been active relative to many other countries in the region, the malaria control programme is located in offices far outside the centre of town.

The office has only one phone line, shared by all staff for phone calls, fax and internet use. It is inadequately staffed and is located well down the organizational hierarchy of the Ministry of Health. Not only do senior officials in the Ministry of Finance and the Prime Minister's Office not give priority to malaria or malaria control, but this is also true of senior officials in the Ministry of Health. Their attitudes are a mixture of 'we have other priorities' and 'there is not a great deal that we can do about this anyway'. This represents a significant failure of RBM to get across the message that:

- malaria is the leading cause of death of children under five in Tanzania;
- there are effective and tested interventions to reduce this mortality; and
- a good deal of the research that underpins these interventions was conducted in Tanzania.

Box 3

Quotes from the Green Report

The following is a selection of quotes drawn from the Report of RBM Stakeholder Interviews¹ (2002) which were consistent with the Evaluation Team's findings of RBM's progress at country level during Phase 1. Countries that participated in the study included: Malawi, Kenya, Zambia, Eritrea, Burkina Faso, India and Bolivia. The quotes were obtained from interviews with Ministry of Health Malaria Control Programme staff, other senior Ministry of Health personnel, Ministerial staff from other sectors (e.g. Finance, Planning, Agriculture), bilateral and multilateral agencies, NGOs, private sector organizations, and research institutes.

“Advocacy by RBM at country level has not translated into high level political commitment to malaria.”

“RBM is not strong here. We don't have very active group members, and meetings are sparsely attended. In contrast, there's an Interagency Co-ordination Committee for Child Immunization which is strong and more committed.”

“RBM did lots of planning for malaria. The perception is that this took us backwards. NMCP staff could have attended the regular forums between donors and government – the WHO representative could have done a lot more to help on coordination. Development of the Malaria Strategy took place in isolation ... Zambia has a great number of SWAps meetings – RBM has largely happened outside these. At district level RBM took a vertical approach in its pilot districts – undermining health reforms.”

“Following a visit to India by senior RBM Cabinet Project staff two years ago it took six to eight months to produce the meeting minutes, and there was no follow-up meeting.”

“There's no private sector involvement in RBM activities in Malawi – NMCP staff simply don't have the capacity to engage with them. They've been moving full steam ahead with all the RBM documentation which has stretched their capacity to the full ...”

“It's taken two years to develop the plan and budget, but no donor has said that they are ready to work with the initiative ... where's the new money? There was a huge drive by government to finish the document and put a budget on it ... The budgeted plan is a white elephant.”

“With the issue of combination therapy, there's a sense that people are having to find their own way. Issues of pros, cons and affordability all have to be established in-country. There's been no technical support on this issue provided by AFRO – and AFRO's position on key issues such as these is not always clear. What are the costs associated with a move towards combination therapy? What are the steps in budgeting for these drugs within the essential drugs package? We sense that Geneva is trying to establish a position – but that parts of AFRO don't buy into combination therapy. With key technical issues such as these RBM could give a stronger lead.”

“TA [technical assistance] tends to come in short bursts, and is not always demand-led.”

¹ The full report appears at page G-1 towards the end of this document.

In Cameroon, the malaria control programme continues to reside at the very bottom of the organizational chart of the Ministry of Health. In contrast to the AIDS unit, which now reports directly to the Minister, the malaria unit must go through five layers of bureaucracy to get approval for any plan of action. There is little sense that malaria is a priority for the government of Cameroon or that the country is prepared to mobilize a significant response to this foremost killer of Cameroonian children.

Disconnect

The External Evaluation Team found that RBM activities on the ground tend to be disassociated from the major health sector planning processes and budgetary cycles of the countries. This disconnect takes several forms.

First is the disconnect between the planning and organization of National Malaria Control Programmes (NMCPs) and the reforms and changes that are underway in the health sector more broadly. A frequent complaint among RBM staff was that previously strong NMCPs had been damaged by aspects of health sector reform, and particularly by too rapid and/or too great decentralization. It is no doubt true that decentralization has been ill-considered in some countries and has done damage to health service delivery generally (examples might include the Philippines and Papua New Guinea). However, it is necessary for RBM to engage in this process and ensure that those central features that are essential for effective malaria control are maintained and strengthened. Similar observations apply regarding the need for RBM's participation in planning and implementation of Sector Wide Approaches (SWAs), and its engagement with private providers.

A second dimension of disconnect concerns the linkages between RBM and other programmes with overlapping objectives and delivery opportunities. The most important of these are probably the links between RBM and Integrated Management of Childhood Illness (IMCI), RBM and any programme which reaches pregnant women, and possibly RBM and the Expanded Programme on Immunization (EPI). At the global and regional levels of WHO, these linkages are given emphasis.¹⁰ These linkages are also being actively promoted in Cambodia. Elsewhere, the linkages are less apparent and there seems to be little energy devoted to seeking out and exploiting the synergies among programmes.¹¹

A third dimension of disconnect, which was of particular importance, concerns financing arrangements. On the one hand, the RBM Secretariat and AFRO have worked with countries to develop CSPs. These CSPs contain a statement of resource requirements. It is typically the case that these resource requirements are unconnected to the ongoing financing and budgetary processes in the country concerned. They are sometimes unrealistically large, and they are seldom linked clearly to what may be practically feasible in the medium term.

These examples of disconnect are perhaps not surprising given that WHO country offices themselves are not always fully plugged into the broader policy and finance debates in the countries in which they work. This problem is further compounded by the tendency in Africa to rely on National Programme Officers (NPOs) to lead RBM activities at the country level. NPOs are, by definition, local appointees. They are typically insufficiently senior to engage in the high level advocacy work required to bring malaria to the top of the health and development

¹⁰ See, for example: *Making an Impact on Child Health: A Framework for Scaling-up RBM and IMCI Implementation in Countries*. World Health Organization Regional Office for Africa, January 2001.

¹¹ Several Partners indicated that they felt that 'good progress' has been achieved in Ghana, Malawi and Uganda in recent years. Others also mentioned Senegal and Zambia. Unfortunately, the Evaluation Team did not visit these countries and did not have access to any secondary materials that could have corroborated these claims.

agendas, and to connect it to broader policy formulation and decision making. Also, since NPOs are appointed by the WHO Representatives (WRs), they may be called upon to perform tasks that are unrelated to malaria control.

CSPs

The idea behind Country Strategic Plans (CSPs) is sound. CSPs provide the vehicle for governments, in collaboration with WHO, to identify a plan of action for malaria control activities over the medium term (often, a period of three to five years). This has been a useful means to encourage more focused and strategic thinking and to get governments, especially in Africa, to move away from old strategies that are not universally effective (such as drainage and indoor spraying) and toward the evidence-based strategies promoted by RBM.

CSPs are also treated by AFRO and the Secretariat as an important vehicle for integrating malaria control into the broader health sector, fund-raising and building partnerships. A recent document, *Country Strategies and Resource Requirements* (RBM, 2001), explains, “CSPs are based on a rigorous analysis of the local situation, cost-effective interventions, partnerships for implementation, integration of malaria control into health sector development and realistic estimates of current resource gaps and the implementation capacity of the country partnerships.”

In practice, however, CSPs have not lived up to this high expectation.

- ❑ In Cameroon, partners were not involved in the development of the CSP, although they will be asked to attend a meeting to approve the document, and to provide financial support to it.
- ❑ Although the CSPs identify the broad technical strategies to be employed within the country, they rarely describe how these strategies will be made operational. For example, critical elements such as use of subsidies, choice of distribution channels, or role of communication approaches such as social marketing, are not described when setting out the ‘strategy’ of improving net coverage or access to essential drugs.
- ❑ A few CSPs, but not all, discuss the importance of integrating RBM activities with IMCI, reproductive health and other health system activity, but do not describe a process for making this happen.
- ❑ A few CSPs discuss the importance of integrating RBM with the broader development processes, such as Poverty Reduction Strategy Papers (PRSPs), but fail to outline how this is to be achieved in practice.

The Secretariat’s approach (not necessarily supported by other RBM partners) has been to call a ‘pledging meeting’ following the completion of the CSP. Partners are asked to pledge their financial support for the plan. This process is not compatible with other funding modalities, such as SWAp funding baskets or PRSP/Debt Initiative for Heavily Indebted Poor Countries (HIPC) related processes. Unrealistic RBM funding expectations can be generated and monies available from existing mechanisms can remain unutilized (Box 4).

Box 4 Unspent Debt Relief in Cameroon

The Cameroon HIPC agreement came into place in mid-2000, making available \$86 million per year of new government expenditure. In the first three years, \$32 million were allocated to health. These funds were for HIV/AIDS, malaria, immunization, TB, essentials drugs, health staff, and health sector strengthening in 50 districts. If these funds were all spent, the health sector expenditures by the government per capita per year would rise from \$0.8 in 2001 to \$1.7 in 2003, thus having a massive impact on the health sector, from which malaria control would also benefit. In practice, almost none of this money has been spent.

The malaria component of the HIPC agreement requires the expenditure of \$2.6 million during 2000-2003 on:

- increased use of ITNs by pregnant women and children;
- increased IPT; and
- improved treatment generally.

None of this money has so far been spent, and there is a lack of clarity in the Ministry of Health, WHO, and other partners concerning how to set about releasing these funds and using them effectively.

Lack of innovation

At least in the African context, the Evaluation Team discovered little in the way of innovative approaches inspired by RBM at the country level. For example, there was a lack of innovation regarding programmatic strategies to deliver the priority RBM interventions. Also, despite evidence that over 50 percent of spending on health is paid for out-of-pocket by households, little has been done to work with local, private sector providers to increase access to or the quality of their services. Similarly, despite evidence of major human resources constraints to scaling-up health programmes within the public sector, little has been done to address this problem creatively – for example, by contracting out.

Box 5 Private Nets in Tanzania

A decade ago, bednets in Tanzania were available in a few shops in big towns for \$10 to \$15 each.

Today, three factories produce 3 million nets per year. 1.5 million nets per year are sold on the retail market in Tanzania. They are widely available in small stores and are even sold door-to-door. Prices are under \$4 per net. Bednet usage is rising.

Population	Percent using	
	Any Net	Treated Net
Children < 5 yrs	46	11
Pregnant women	36	8
All	40	N/A

The big challenge is to increase coverage with nets and greatly increase the use of insecticide impregnation. A switch to the manufacture and sale of long-lasting nets may be the best way to achieve this.

Private sector

In Asian countries, it is common for between 70 and 90 percent of all health care to be financed by out-of-pocket expenditures by households and to be provided by doctors and clinics that are not part of the public health care infrastructure. In Africa, this proportion is commonly around 50 to 60 percent and is growing in a number of countries, such as Tanzania. It is essential that NMCPs focus on the need to improve access to and quality of both preventive and curative services delivered through the private sector. The NMCP in Cambodia is doing this. In Tanzania the private sector has revolutionized the availability and use of bednets (Box 5).

A related issue is the inability of public services to deliver all that is required in the field of malaria. There is an urgent need to contract out to private sector suppliers and providers. In many countries, and especially Southern Africa, there is a reluctance to go down this road or to allocate significant public finance to private provision. This attitude requires a sea-change. Without extensive use of private providers, financed both through public and private channels, malaria will not be rolled back.¹²

Prioritization and selectivity

There are 50 malarious countries in Africa and 130 worldwide. It is impossible in practice for RBM to support effectively scaled-up malaria control activity in all of these countries. In addition, some of these countries are simply not ready to go to the next level in their malaria control activities. This may be because of government failure, economic crisis, civil unrest, war or a variety of other reasons. There have been several attempts, both in WHO and among RBM partners, to define a list of focus or spotlight countries and to agree on a heightened level of activity in those countries.¹³ None of these discussions have gelled into a clear strategy or plan of action. There is confusion about focus or spotlight countries among the partners and within WHO.

The substantial majority of people interviewed by the Evaluation Team agreed that country selectivity or country focus was essential in practice. Without this, there was thought to be a real prospect that, in five years time, no high-transmission African country would be able to reliably demonstrate a significant decrease in the burden of malaria. Such an outcome would be a massive setback for RBM and for international efforts to control infectious disease in general. There was consensus that this outcome must be avoided at all costs.

Report of RBM stakeholder interviews

As mentioned in Section 1.2, a parallel evaluation was conducted (Green, 2002) of RBM stakeholder opinions, with special emphasis on the country level. Table 3 presents the ten main messages from this report. The countries that were included in this study were:

- | | |
|---------------------------------------|----------------------------------|
| <input type="checkbox"/> Bolivia | <input type="checkbox"/> Kenya |
| <input type="checkbox"/> Burkina Faso | <input type="checkbox"/> Malawi |
| <input type="checkbox"/> Eritrea | <input type="checkbox"/> Zambia. |
| <input type="checkbox"/> India | |

¹² It should be noted that, in many OECD countries, public finance of private provision is the norm in health care delivery. This private provision embraces both not-for-profit and for-profit providers. Such systems are commonplace, even in countries that emphasize social solidarity and equity in health care, such as the Netherlands.

¹³ At the 2nd meeting of the RBM Partnership in Harare in 1999, eleven countries in Africa were identified as spotlight countries. These were Angola, Congo, Ethiopia, Kenya, Mali, Mauritania, Mozambique, Senegal, Tanzania, Uganda and Zambia. The World Bank committed to playing a particularly strong role in Ethiopia, Mali, Mauritania, Mozambique, Senegal, Tanzania and Uganda. The focused effort on these spotlight countries was not sustained, although RBM Partners seemed to be unable to provide a consistent explanation for why this was so.

Table 3
Main Messages from the Study of RBM Stakeholder Opinions at Country Level¹

Message 1	Partnerships at country level will be difficult to sustain without adequate funding. RBM should use its leverage at global level and intensify its efforts to broker funds for country level activities.
Message 2	Mechanisms for funding NGOs as key RBM partners need to be identified.
Message 3	RBM needs to be better informed of the local health sector context, and to find ways to integrate with local-level processes. This will require changes in the RBM approach and in the skills of key RBM staff.
Message 4	To better support RBM partnerships at country level malaria focal points require a different skills-set. Strong management and leadership skills are required.
Message 5	To maintain political commitment to malaria at local level, sustained advocacy by RBM is required.
Message 6	A global focal point for RBM is required at country level – this could be UNICEF, WHO or World Bank.
Message 7	Founding partners at global level need to look for ways to operationalize at local level their global commitments to malaria.
Message 8	RBM needs to build ongoing relationships with individual countries rather than rely on short bursts of technical assistance.
Message 9	RBM technical teams need to include social scientists as well as biomedical experts to ensure that demand as well as supply side perspectives inform the RBM approach.
Message 10	More work needs to be done at country level to develop clear strategies for enhancing community mobilization.

¹ Green, C. (2002) *Report of RBM Stakeholder Interviews*. Department for International Development. (This full report appears at page G-1 towards the end of this document.)

A wide variety of stakeholders were interviewed in each country. Interestingly, despite the fact that there was no interaction whatsoever between the main Evaluation Team and Cathy Green, the ten messages are identical to findings reached by the Evaluation Team concerning the country level. In some respects, the findings of this separate study are uncannily similar; for example, Messages 4 and 6 concerning Country Champions and Message 8 concerning relations with countries. The consistency of the findings contained in these two reports, based on data collected independently, provides important validation.

Good practice in Cambodia

In Cambodia, one of the three countries visited by the Evaluation Team, RBM and malaria control were working strikingly better than seen elsewhere. Certainly, RBM in Cambodia will face many challenges in the years ahead, not the least of which will be how to move from a well-funded, centrally driven malaria control programme to one which is well integrated with the existing health care system, which is currently underdeveloped and not well funded. However, the Evaluation Team was nonetheless impressed by the momentum that RBM has generated. Specific examples of innovation and good practice in Cambodia are given in Box 6.

Box 6

Cambodia: Progress and Initiative

Cambodia is a very poor country (GNP of around \$300 per capita per year) with a population of 12 million. It has only recently emerged from decades of civil unrest and disruption, during which many people, especially the professional and educated, died. The pace, dynamism and innovation in the Cambodian NMCP are impressive. Malaria in Cambodia occurs mainly in the sparsely populated, forested hill-country on the borders with Thailand, Laos and Vietnam. Among the notable achievements of the Cambodian NMCP are:

- close linkages between operational research and programme design and delivery;
- emphasis on social marketing to encourage informed demand for drugs and bednets;
- a strong NMCP;
- effective malaria leadership and coordination provided by a Country Champion located in the WHO Office in Phnom Penh;
- successful efforts to work synergistically with other programmes, especially IMCI and EPI;
- pioneering and widespread use of antigen dipsticks for malaria diagnosis;
- pioneering use of new combination therapies (artesunate and mefloquine) with local blister packing facilities;
- vigorous ITN programme through public and private channels; and
- emphasis on provision of preventive, diagnostic and curative services through both the private and public sectors.

All this has been achieved in the context of weak government health infrastructure and very low (only 1% of GDP) public expenditures on health. No effective M&E system has yet been put in place and so it is not possible to accurately assess the impact.

The RBM partners of significance in Cambodia include WHO, the World Bank, the European Commission, DFID and USAID. The relationship between the EC and RBM could be much improved and the EC's long-term commitment to malaria control in Cambodia and the Mekong region is in doubt. UNICEF is not an active participant in RBM in Cambodia. WPRO is providing strong support. Partners other than WHO were not aware of RBM. There is a strong sense that the Cambodia programme predates RBM and would be successful whether RBM existed or not. No RBM staff member from WHO Geneva had ever visited Cambodia until one accompanied the Evaluation Team in January 2002. Availability of funding through WHO has helped WHO to drive the programme and reinforced its role as the leading partner. Future challenges include strengthening the delivery infrastructure, ensuring quality in the private sector, improving donor commitment and coordination, suppressing counterfeit drugs, and achieving measurable reductions in malaria.

2.3 The Role and Performance of Partners

It was striking to the Evaluation Team that, in general, partners were dissatisfied with the performance of other partners. In every case it was stated that other partners had not fully lived up to expectations or to the commitments that they had made. Some partners questioned the value-added of RBM, expressing doubt that the returns on their investments in terms of time and resources were higher than would have resulted if the partners had been operating independently. In general, the Evaluation Team concluded that the criticisms of partners by other partners were thoughtful and well founded. This section lays out some of these criticisms and offers an independent assessment.

2.3.1 WHO

The External Evaluation Team encountered more criticism of WHO than of other partners. This is partly because WHO has taken upon itself the major responsibility for the success of RBM, and the lack of structure and governance makes it easy for failure to be laid at the door of WHO rather than other partners. It is important to keep this in mind when considering the comments about WHO, and also to keep in mind that there were substantial criticisms of other core partners.

WHO's functions in RBM during Phase I have included both the staffing and housing of the Secretariat for the RBM Partnership and WHO's role as a partner within the Partnership. The report comments first on the Secretariat, second on technical leadership, this being WHO's main role as a partner, and subsequently on several other issues.

The Secretariat

Since the inception of RBM, the Secretariat has been located within WHO headquarters. Initially, it had a Cabinet Project status and reported directly to the Director-General. More recently, it has been subsumed under the cluster dealing with communicable diseases. Some of the main shortcomings of the Secretariat have already been mentioned. It reports to the RBM Manager (who reports to the Executive Director of the Communicable Diseases cluster) and not to the Partnership. It is staffed by WHO employees. It used to contain one World Bank secondee, and now contains secondees from USAID and Centers for Disease Control and Prevention (CDC), but none from other RBM partners. The Secretariat is, inevitably, responsive to WHO management rather than to the Partnership.

The major shortcoming of the Secretariat has been the lack of adequate leadership of the RBM Partnership as a whole. If such leadership had been provided, a number of the deficiencies described in this chapter of the report would have been avoided or reduced. The Secretariat has not been particularly effective in coordinating and orchestrating activities within WHO, for example between WHO headquarters and AFRO. It has been even less successful in stimulating and coordinating activity among the partners as a whole. Partners do not feel that the Secretariat keeps them well informed of RBM activities or involves them at crucial stages in policy formulation and decision making. The Evaluation Team found that the Secretariat had not been proactive in bringing in important new partners, such as the European Commission. The Secretariat clearly has not been proactive in identifying and resolving the discontent that was so apparent to the Evaluation Team in its discussions with the partners.

Technical leadership

Partners unanimously expressed the view that WHO should do one thing really well as its major contribution to the RBM Partnership – namely, provide technical support and leadership in the area of malaria control. It was also the general opinion that WHO has not fully lived up to this expectation.

Malaria is an exceptionally complex disease. Technical leadership in malaria control is demanding not only because of these complexities but also because, mainly due to evolving resistance, the correct technical advice changes rapidly. Synthesizing, interpreting and disseminating the latest evidence on ITNs, on prophylaxis and treatment in pregnancy, on use of dipsticks rather than microscopy, on choice of first-line and second-line drugs, and on several other matters is a large task.

In the areas of prophylaxis and treatment for pregnant women, many of those interviewed thought that WHO had been slow to take leadership in this area and that USAID and CDC have had to step in to fill the gap.¹⁴ The most complex and contentious of all arenas is that of drug policy. The gathering and interpretation of data on the relative efficacy of existing and new drugs is complex in itself. Translating this evidence into viable national drug policies which fully take into account such issues as cost, supply and compliance, is a further major difficulty. These decisions are all played out in a political and economic context in which countries are conservative and reluctant to change from long-established and cheap first-line therapies (especially chloroquine) to alternatives that are

¹⁴ Evidence on the desirability of preventing or treating malaria in pregnancy continues to grow. In malaria-endemic areas of Africa, one quarter of pregnant women may harbour placental malaria and babies born to these women are twice as likely to have low birth weight ($\leq 2500\text{g}$) and three times more likely to die in the first year of life (Guyatt and Snow, 2001).

new, little-known and possibly much more expensive and/or complex (as in the case of combination therapy).

It is not uncommon for countries to receive conflicting advice on drug policy, both from their own national experts and from international organizations that are working with them. The Evaluation Team also had difficulty sorting out which partners had advocated what in selected countries. In Zambia several partners reportedly had been working with government officials to encourage a switch from chloroquine to sulfadoxine/pyrimethamine (SP). These efforts became confused by a parallel but uncoordinated effort on the part of WHO to introduce a new and different first-line treatment. Similar confusion persists over the drug policy situation in Zanzibar, and is further complicated by the lack of coordination with mainland Tanzania. The inability of partners to coordinate creates a major strain on governments. An illustration of the types of disagreements that have arisen is presented in Annex C.

Box 7 Anti-Malarial Drugs Made Simple

Countries are transitioning from chloroquine to SP (sulfadoxine-pyrimethamine or Fansidar) to combination therapy (CT), or artemisinin-based combination therapy (ACT). Countries may move from chloroquine to SP to CT to ACT, or from chloroquine to CT to ACT, or from chloroquine to ACT. Artemisinin comes from the Chinese bush qinghao (sweet wormwood) and its derivatives are arthemeter and artesunate.

Common examples of CT include:

- amodiaquine plus SP;
- atovaquone plus proguanil (Malarone®).

Common examples of ACT include:

- arthemeter/lumefantrine (Coartem®);
- artesunate plus amodiaquine;
- artesunate plus mefloquine;
- artesunate plus SP.

Other combinations are in the pipeline or under trial. Complex issues concerning safety for young children, safety for pregnant and breastfeeding mothers, availability in suppository form, cost, availability and packaging affect the choices among these first-line drugs. ACT currently costs about \$1 per treatment more than CT. For Kenya to change from amodiaquine plus SP to amodiaquine plus artesunate would cost about \$6 million per year (MSF, 2002). In practice, cost-effectiveness is more important than cost. SP is five times more cost-effective than chloroquine in Kenya, Uganda and South Africa (given current resistance levels) despite being over ten times more expensive (Wilkins *et al*, 2002).

In some regions, countries themselves have got together to try to coordinate evidence and policy in the difficult arena of drug choice. For example, Burundi, Kenya, Tanzania, Rwanda and Uganda have formed the East African Network for Monitoring Anti-malarial Treatment (EANMAT). Funded by DFID, EANMAT is proving to be an effective mechanism to assist this group of countries to formulate and implement appropriate policies. Similarly, the South-East African Combination Anti-malarial Therapy (SEACAT) has been created by Mozambique, South Africa and Swaziland (with inputs from the London School of Hygiene & Tropical Medicine and CDC) to study the effect of combination therapy on resistance. SEACAT is supported by the Special Programme for Research and Training in Tropical Diseases (TDR). Box 7 provides further information about the complex arena of anti-malarial drugs.

Other partners, and most individuals interviewed within WHO, agreed that WHO should be constantly at the frontier of the rapidly evolving technical issues that underpin malaria control. While some strong contributions by WHO in some areas are recognized, overall it is thought that WHO's contribution falls short of the technical leadership expected and required. It is emphasized by many commentators that this technical leadership cannot be achieved by the technical experts in WHO headquarters and WHO Regional Offices alone. It should result from

a process of interaction between those technical experts and the worldwide community of scientists and researchers who are knowledgeable about various aspects of malaria. It is the leadership of a technical consensus, and the effective articulation and wide dissemination of that consensus, that are the key functions of WHO.¹⁵

Regional Offices

The Evaluation Team did not visit every Regional Office or every region. In particular, the Evaluation Team had no contact with the Regional Office for the Eastern Mediterranean (EMRO), and only minor contact with the South-East Asia Regional Office (SEARO). Snapshots of malaria in some WHO regions are given in Boxes 8-11.

Box 8 Malaria in the Eastern Mediterranean Region

The 23 countries in EMRO are divided into four groups in relation to malaria.

- ❑ Group 1, comprising nine countries and seven percent of the region's population, in which malaria has been eradicated. Interestingly the dates of eradication range from 1953 (Cyprus) to 1979 (Kuwait). No countries in the EMR have been declared malaria-free in the last 23 years.
- ❑ Group 2, comprising five countries and 24 percent of the region's population, in which malaria is under control and elimination is targeted.
- ❑ Group 3, comprising four countries and 53 percent of the region's population, in which there is moderate endemicity of malaria, fairly well-established control programmes, and either stable or declining malaria burden.
- ❑ Group 4, comprising Afghanistan, Djibouti, Somalia, Sudan and Yemen, with 16 percent of the region's population, in which there is a severe malaria problem, intense transmission, and wholly inadequate control programmes. 95 percent of malaria burden in the EMR occurs in these countries. Several of them are the sites of complex emergencies.

The presence in the region of nine countries which have eliminated malaria (including three large countries: Jordan, Libya and Tunisia), and five countries which could eliminate malaria in the foreseeable future, gives confidence that further substantial progress can be made in the EMR. While some countries, such as Afghanistan and Sudan, will prove extremely challenging, others should be able to make rapid progress. For example, there is absolutely no reason why 11 million people in Saudi Arabia, out of a total population of 19 million, should live in malaria-endemic areas.

The Evaluation Team was especially impressed by the Pan American Health Organization (PAHO) and the Western Pacific Region (WPRO), with their competent and energetic professionals, good strategic grasp, and close relations with the research and researchers in their regions. PAHO and WPRO also enjoy excellent relations with the countries in their regions. In Cambodia WHO staff, other donors and the government were pleased with the support that they were receiving from WPRO. It is also noteworthy that in these regions communications flow easily between WHO country offices and the Regional Office, and that technical advice is received in a timely and effective manner.

The Evaluation Team did not have sufficient contact with SEARO to form a reasoned judgment and visited no countries in the SEARO region. However, the evidence that was available suggests that SEARO lacks the critical mass of expertise that would allow it to provide strong leadership for RBM in the region. The Team was informed that there were only three RBM-focused staff in SEARO, and that they were unable to service adequately the needs of the many endemic

¹⁵ There are good historical examples of WHO playing this role effectively, even when having only a small number of technical experts within WHO. For example, the technical leadership in diarrhoeal disease control during the 1980s is an illustration of good practice in this arena. It requires a small number of highly competent people within WHO interacting with a substantial network of expertise located worldwide.

countries in their region, including two very large countries with a substantial malaria problem – namely India and Indonesia (see Annex D and Box 10).

Box 9 **Malaria in the European Region**

Malaria was eradicated from all countries in the region by the early 1960s except for Azerbaijan, Tajikistan and Turkey. Since the early 1990s, however, the malaria situation in the European Region has deteriorated greatly owing to political and economic instability. Major epidemics of malaria have recently occurred in Azerbaijan, Tajikistan and Turkey. Smaller epidemics have occurred in Armenia, Georgia and Turkmenistan. Sporadic cases of malaria occur in Bulgaria, Kazakhstan, Kyrgyzstan, Moldova, Russia and Uzbekistan. Worryingly, while most European malaria is caused by *P. vivax*, *P. falciparum* has been rapidly increasing, particularly in Tajikistan. Special problems faced in the European region include:

- the concentration of intense transmission in areas with poor access and health facilities, for example the Afghan/Tajik border;
- poor capacity for early diagnosis and prompt treatment;
- the exophilic behaviour of the principle vector, *Anopheles pulcherrimus*;
- shortages of insecticides and limited use of anti-larval measures;
- poor malaria surveillance systems; and
- low level of community knowledge and skill concerning malaria prevention.

The situation is greatly complicated by the existence of complex emergencies in a number of the most affected countries. On the other hand, the previous eradication of malaria from all except three countries gives hope that this historical situation can be re-established, and a target has been set to interrupt *P. falciparum* malaria transmission by 2005, with the ultimate goal of eradicating malaria from the region by 2010.

Box 10 **Malaria in the South-East Asian Region**

All ten countries in the South-East Asia Regional Office (SEARO) of WHO have endemic malaria. The problem ranges from minor, as in North Korea, to extremely serious, as in Irian Jaya province in Indonesia. Because of the large population in the region, especially in Indonesia and India, the number of malaria cases is very large. There are no comprehensive estimates of the size of the malaria burden in the SEARO. More than half of all mortality cases probably occur in India. In several countries in the SEARO, malaria is particularly a problem of ethnic minorities living in border areas, and/or forested hill-country. These populations tend to be poor and difficult to reach.

Resistance to the older malaria drugs, and some of the newer ones, is particularly commonplace in Thailand and its neighbours. There do not appear to be effective working relationships among SEARO countries to exchange information on drug resistance and work together on drug policy. Counterfeit drugs are a particular problem in the region, India being an important source. Equally, the region is fortunate to have the technical capacity to manufacture anti-malarial drugs in large quantities, including new and more sophisticated drugs.

The concentration of malaria in border areas raises the need for cross-border collaboration, which is sometimes made difficult by hostilities and political tensions. The Mekong Project and the Thai/Myanmar Border Health Collaboration are examples of efforts to tackle malaria on a multi-country basis.

SEARO has launched an intensified RBM effort in 24 districts in seven countries in the region with a total population of 16 million people. This pilot district project intends to demonstrate effective implementation of RBM strategies at the local level.

Clearly, with respect to the overall success of RBM, AFRO is the Regional Office of greatest importance. The picture here appears to be mixed. On the one hand, the Evaluation Team was impressed by the high quality and dedication of the AFRO staff and of the staff in the Southern African Malaria Control team (SAMC). The effectiveness of these professionals is constrained, however, by the system in which they work and by deficiencies in their relationships with WHO headquarters.

Firstly, both the culture and the management style leave much to be desired. A politicized and inflexible bureaucracy impedes the ability of AFRO staff to provide effective support to their client countries. The art of 'getting things done' is hampered by restrictions and regulations. Of greatest concern is the fact that despite being stretched to capacity, AFRO staff spend much of their time in reactive rather than proactive mode. They respond to country requests on an *ad hoc* basis and consequently are unable to sustain an intensive and ongoing programme of support to a selected list of countries. Moreover, AFRO staff are not assigned to specific countries, which further impedes follow up and the tracking of country progress.

This situation also leads to a 'mission mentality'. When staff were asked about the state of RBM in a particular country, the replies typically concerned the situation two or more years previously, when an AFRO staff person had last visited that country. Instead of a close ongoing relationship between AFRO RBM staff and their colleagues and counterparts in particular countries, more typically there is an intermittent relationship based on visits, and an absence of sustained and long-term partnership. RBM staff in AFRO were well aware of the advantages of staying closely connected with the ongoing policy and operational arena in particular countries. They felt, however, that the pressures on them prevented this from occurring. In addition to the need to react to country requests on an *ad hoc* basis, they were also kept busy with travel to Geneva and other countries to attend meetings, with writing reports and guidelines, and with administrative duties that had little bearing on providing effective support to countries. SAMC appeared to have a closer ongoing relationship with the ten countries in its sub-region.

This problem is compounded by rules that obstruct effective communication. It is difficult, for example, for an RBM staff member in AFRO to communicate regularly and effectively by email with the NPO or the Head of the NMCP in a particular country. Communications (usually in the form of letters) pass upwards in AFRO to the Regional Director, across to the WHO representative in the country concerned and then downwards to the NPO, or across to the Minister of Health and down (in some cases way down) to the NMCP. This process can take many weeks. This cumbersome way of interacting was in strong contrast with what was seen in WPRO, indicating that organizing things in this way is not a requirement of the WHO system.

There are also clear deficiencies in the relationships between WHO in Geneva and AFRO, which stem from a lack of clarity about who is responsible for what. The 'One WHO' policy of the Director-General is not working in the case of RBM. Roles and responsibilities are ill-defined between WHO headquarters and AFRO, and it seems to be more a matter of accident and availability of staff than of policy that determines who takes up which task and who responds to which need.

AFRO has created several sub-regional Inter-Country Teams. Only SAMC, dealing with ten countries in Southern Africa, is fully operational. The Evaluation Team was impressed by a presentation it received from the head of SAMC. It seems that, at least in principle, these Inter-Country Teams, being closer to countries and dealing with a smaller group of countries, can provide effective and consistent country support. In practice, however, we suspect that this potential is to some degree impeded by the cultural and bureaucratic problems referred to above. In addition, it must be noted that several key positions within SAMC are vacant.

Box 11

Malaria in the Western Pacific Region

Nine countries in the WPRO have a moderate to severe malaria problem. These are:

- | | |
|---|--|
| <input type="checkbox"/> Cambodia | <input type="checkbox"/> Philippines |
| <input type="checkbox"/> China | <input type="checkbox"/> Solomon Islands |
| <input type="checkbox"/> Laos | <input type="checkbox"/> Vanuatu |
| <input type="checkbox"/> Malaysia | <input type="checkbox"/> Vietnam |
| <input type="checkbox"/> Papua New Guinea | |

The three countries of Melanesia – Papua New Guinea, Solomon Islands and Vanuatu – have malaria transmission as intense as that found in Africa. Some features of malaria in the region are:

- widespread drug resistance to chloroquine, SP, and increasingly mefloquine;
- problems with counterfeit artesunate and mefloquine;
- antigen dipsticks for diagnosis are becoming widely used;
- decentralization of health services has seriously undermined NMCPs in Papua New Guinea, the Philippines and Vanuatu; and
- in Papua New Guinea and the Solomon Islands the malaria situation is much worse than it was two decades ago because of poor economic performance and civil unrest.

WPRO collaborates with SEARO on the Mekong Roll Back Malaria Initiative which covers Cambodia, China, Myanmar, Laos, Thailand and Vietnam. WPRO provides strong support to the countries in its region and WHO is the leading partner in RBM. Partner coordination in the region is weak, with some partners or potential partners either not joining or not collaborating. There is a strong desire in the region for greater participation in RBM by Japan and UNICEF. There are concerns about the sustainability of finance as more expensive combination therapies become more widely used.

The Asian Collaborative Training Network for Malaria (ACTMalaria) is active in the region. ActMalaria was created in 1996 as an intercountry initiative by Bangladesh, Cambodia, China (Yunnan Province), Indonesia, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam to collect, develop and disseminate training materials and provide training courses in southeast Asia and the Mekong valley, and to improve communication between these countries on malaria control problems affecting their common borders.

The region benefits from having some of the most innovative NMCPs in the world (Cambodia and Vietnam), and also for being the source of research and production of important new anti-malarial drugs (China and Vietnam).

Finally, there are many missed opportunities for sharing experience and expertise from the region with others. RBM staff from the region have not acted as consultants elsewhere and the visit of the Evaluation Team was the first time RBM staff from WHO Geneva had been to Cambodia since the creation of RBM in 1998.

Country level

WHO's performance at the country level on RBM is similar to WHO's performance at the country level in general – in a word, patchy. The quality, competence, energy and effectiveness of WRs and their teams vary greatly and this variation largely determines their effectiveness in malaria and other matters. Where the WR is knowledgeable and committed, and has a sufficiently senior staff member who is also knowledgeable, committed and devoted largely to malaria, the WHO role is effective. Where this is not the case, the WHO role is less effective. WHO AFRO has now appointed 28 NPOs in 26 countries. This is a good idea in principle, and these national officers can, and in some cases do, assist the RBM effort at the country level. They are not, however, sufficiently senior and experienced to play a major advocacy and coordinating role. Where international staff with the right personal attributes and seniority are appointed to an RBM role in the WHO country office, as in Cambodia, things go well and WHO's leadership is apparent.

2.3.2 The World Bank

The World Bank was a founding partner of RBM (see Annex A). It enthusiastically encouraged the new prominence given to malaria by WHO headquarters and WHO AFRO, and the creation of the RBM Partnership and the Cabinet Project. The World Bank was an active participant in RBM activities, especially in the early years. The World Bank led or participated in joint country missions in 1998 and 1999 (to Ethiopia, Kenya, Malawi, Mozambique, Tanzania and Uganda) which initiated the process of the development of CSPs. Early in RBM, the Bank had a small Malaria Team located in its Africa region focusing on RBM. One member of this team was subsequently seconded to WHO to work in the RBM Partnership, but she soon left this position and a replacement was not made.

At the Abuja Summit in April 2000, the World Bank made a headline-grabbing pledge of US\$300-\$500 million towards the control of malaria in Africa. It was not clear whether this was an annual figure or over a certain period of time. The World Bank's Vice-President who led the Bank Team to the Abuja Summit stated, "the resources can be deployed to increase the fight against malaria but there has to be an explicit, country driven, country owned, and country prioritization in order to win that fight." In practice, the pledge has not translated into large increases in actual lending or disbursement by the Bank to countries for efforts against malaria.¹⁶ Following the summit, the Vice-Presidents for Africa and Human Development wrote jointly to all Bank staff working in the African Region calling for increased priority to be given to malaria in national policy dialogues. The Vice-Presidents also called specifically for the inclusion of malaria targets as indicators for HIPC completion points and increased lending for malaria wherever the national absorptive capacity made this possible.

A review of World Bank International Development Association (IDA) commitments to malaria control during the 1990s revealed total commitments of \$477 million, out of total Health, Nutrition and Population (HNP) commitments of \$11 billion over the same period. About one quarter of all Bank HNP projects had malaria components or malaria activities. The large IDA malaria project in India, approved in Fiscal Year 1997, accounts for one third of total malaria commitments. Concerning malaria commitments by regions, nearly 40 percent of dollars are committed to the South Asian region, strongly influenced by the large India project, and only 16 percent to Africa. There are currently 45 active World Bank projects in over 30 countries which have malaria components or fund malaria activities.

The Bank's role

There is a clear consensus among other partners about the role they would like the World Bank to play. It is as follows:

- to raise the profile of malaria on the overall development agenda and in national priority setting;
- to bring the financing needs of RBM to the attention of Ministries of Finance;
- to ensure that PRSP and HIPC processes give appropriate weight to malaria, and that monies assigned for malaria are available for use in practice; and

¹⁶ This is similar to other large pledges made by the Bank. The Bank rightly qualifies these pledges with the statement that countries have to request these funds from the Bank and have to take the lead in preparing plans and driving the process forward. When the pledged sums do not in fact get committed or disbursed, the Bank (again, plausibly) says that the necessary drive and initiative from the country was lacking. The funds were indeed available had they been requested. There is a circular and Catch 22 nature to these stories. In the field of malaria, and in other fields of priority social development, there is a need for greater honesty in these types of public pronouncements.

- to ensure that IDA funds are available where needed in individual countries to finance (if necessary on a long-term basis) some of the costs of malaria control.

The view of the other partners is that, in practice, this role is not being fulfilled. The general impression of the Bank among the other partners is that it ‘talks the talk,’ but does not deliver in practice on the ground. Partners find that the Bank is not sufficiently active as an advocate for malaria in the broader development discussions and with the Ministries of Finance. Partners find it hard to engage with the Bank to understand or make use of PRSPs, HIPC and related processes. Partners also find the Bank’s lending cycle difficult to penetrate and frequently have the experience that IDA funds are either not available or, where they are, are difficult to make use of and slow to disburse (see Annex E).

Within World Bank headquarters there is no full-time staff person assigned to Roll Back Malaria (except a CDC secondee). The senior RBM focal person at the Bank has no budget to pay for his time or his staff’s time in attending meetings and ensuring that the Bank is a fully participating partner. Coupled with the fact that World Bank country offices frequently do not have health specialists assigned to them, this means that the World Bank’s ability to make substantive contributions to the RBM Partnership are limited. That is, the Bank’s presumed comparative advantage in development policies, sector-wide planning and budgeting is inaccessible to the broader RBM Partnership.

Resources and Financing Instruments

The Bank has come under attack for its position that ‘money is not the problem’ in malaria. At least in some country contexts, the Evaluation Team found corroborating evidence to support this position. In Cameroon, substantial sums of money have been earmarked for malaria under HIPC. The challenge is to find ways of ‘unblocking’ these funds (Box 4). In Tanzania, substantial monies for malaria are potentially available through the SWAp basket, through the HIPC, and through the Poverty-Related Budget Support Programme (PRBS). These funds are not in practice being used to finance the NMCP, and in some cases relevant donors and government officials are unaware of them or unaware of how to make use of them. In addition, the World Bank Adjustable Programme Loan (APL) in Tanzania could easily be used to make funds available for malaria control over the long-term. However, this is being neither done nor discussed, and again many donors and relevant government officials are unaware of the APL or the potential to partially refocus it on malaria (Box 12).

This raises the question: whose responsibility is it, among the partners, to invest time and effort in getting these resources unblocked? It was largely through the World Bank’s efforts that these funds became available in the first place. However, many World Bank country offices do not have a health specialist to help move the process forward, and the other partners (WHO, UNICEF) do not have the knowledge to do so. It seems evident that this problem would not be difficult to address within the context of a well-functioning Secretariat, since RBM staff would work at the country level to help unblock these resources.

Overall, the Evaluation Team gained the sense that the World Bank was a more effective and committed partner early in the life of RBM. The Malaria Team in the Africa region was proactive and effective in collaborating with other RBM partners. The Fiscal Year 1999 status report on Roll Back Malaria at the World Bank provided an excellent summary of activities and priorities. There has been no such report in subsequent years. Other partners wish the World Bank to re-engage in the partnership with the same enthusiasm and commitment as was evident in the earlier years.

Box 12 **SACs, APLs and Malaria in Tanzania**

World Bank activities in Tanzania have emphasized malaria and provided financial support for malaria control. Unfortunately, this has not been widely known and little use has been made of it.

In 1997 the World Bank agreed a structural adjustment credit (SAC) with Tanzania of \$129 million. Co-financing was provided by Norway. The funds were intended to be disbursed rapidly and to facilitate a range of reforms in public expenditure management, social sector policy and investment, parastatal reform, banking reform and petroleum sector liberalization. The health sector component of the social sector reforms included provisions concerning pharmaceutical cost recovery, decentralization, and malaria. The SAC conditionality for malaria was that the Government of Tanzania should "prepare an action plan to reduce the life years lost to malaria". The Evaluation Team has no information on whether this was ever done or what stimulating effect on the NMCP this SAC may have had. The Team noted that no one to whom it spoke in Tanzania, other than World Bank staff, were aware either of the SAC or the malaria conditionality within it.

In 2000 the World Bank and the Government of Tanzania agreed on a health sector development (HSD) programme funded by a \$100 million adjustable programme loan (APL) over 12 years. APLs are a new World Bank lending instrument introduced in 1997. They provide long-term, large-scale, flexible financing. This mechanism is ideal for disease control programmes such as malaria, and generated much excitement among health staff at the Bank when it was first introduced.

The Tanzanian HSD APL is divided into three phases. Phase I (2000-2003) provides \$22 million for a variety of reforms, including the development, costing and implementation of an essential clinical and public health package. This package includes malaria treatment and control. As at November 2001, only \$3.5 million had been disbursed. A mid-term review of Phase I is due during 2002, and provides an opportunity to direct more attention to large-scale implementation of malaria control activities. Such a shift in priority is permissible within the APL, but requires justification and advocacy from the Ministry of Health. The Evaluation Team met no one in Tanzania outside the World Bank office who was familiar with the HSD APL or with its potential to be partially refocused in support of malaria control.

2.3.3 UNICEF

UNICEF's participation in RBM in the early years was felt by other partners to be less active and less committed than expected. UNICEF is also criticized for a tendency to 'go it alone' at the country level and not coordinate its activities closely with other partners. UNICEF's enthusiasm for distributing free bednets to women and children regardless of socio-economic status was frequently cited as a policy that sometimes undermines social marketing efforts being made by the government and other partners. Notwithstanding these comments, it is the relative lack of engagement of UNICEF, until recently, that was most striking to other partners.

This situation has now changed quite dramatically. The Executive Director of UNICEF and its Chief of Health have made strong commitments to RBM and to the goal of effective malaria control. RBM has been designated as UNICEF's major health sector priority, after childhood immunization, and as its 'flagship' programme for child survival in Africa. The new UNICEF Medium-term Strategic Plan (2002-2005) recognizes malaria control and prevention as an important part of the integrated early childhood care for survival, growth and development (I/ECD). In Africa, in particular, UNICEF has become very active in its collaboration with RBM and is engaged in strengthening its technical capacity both at its headquarters in New York and in its Regional Offices in Africa. All this is encouraging and bodes well for the future. However, an important challenge for the future, discussed below in Section 3.3.3, is to define UNICEF's comparative advantage within RBM and to reach agreement on the areas in which its contributions should focus.

2.3.4 UNDP

UNDP was a founding partner of RBM. Since then, it has been a silent partner and the other core partners believe that it has had no role in practice. UNDP was unavailable to interact with the External Evaluation Team. The Evaluation Team is aware that UNDP has given a small grant for malaria control in the Solomon Islands, but found no evidence of other contributions.

2.3.5 Bilaterals

In general, the bilaterals' involvement in RBM is viewed more favorably than that of the founding partners. Both DFID and USAID have played major roles in keeping the flame alive. DFID's contributions have been particularly significant with regard to support to the Secretariat, whereas USAID is the leader among the partners in direct investments in malaria control activities. DFID and USAID have also played an important role as conduits to and financers of the technical expertise on malaria that exists in the United Kingdom and the United States. For example, the Malaria Consortium, drawing on the combined expertise of the London School of Hygiene & Tropical Medicine and the Liverpool School of Tropical Medicine, has made and continues to make substantial contributions to RBM. Similarly, USAID calls on the unrivalled capacities of CDC, and also has good access to the immense scientific resources of the National Institutes of Health (NIH).

USAID has received some criticism from other partners for its 'go it alone' approach to funding health sector programmes. USAID does not channel its funding through SWAp baskets, as do other bilateral donors, and its country level work is not always fully coordinated with other partners. USAID has recently announced a new Malaria Action Coalition (see Box 13).

Box 13 USAID's Malaria Action Coalition

As part of its commitment to RBM partnership USAID has organized its funding to facilitate coordination and joint planning among four of its primary technical partners for malaria: the World Health Organization, the Centers for Disease Control and Prevention (CDC), and two of USAID's projects – the Rational Pharmaceutical Management-Plus Project (RPM Plus) and the Maternal and Neonatal Health (MNH) Project. This Malaria Action Coalition (MAC) will provide technical assistance coordinated with other RBM partners in pursuit of two of the Abuja Summit targets:

- 60% prompt and effective treatment of malaria illness, particularly for children under five;
- 60% access of pregnant women to intermittent preventive treatment (IPT) .

The Coalition will provide coordinated and focused expertise to inter-country groups, national governments and private sector partners throughout Africa in the areas of strategic framework development, epidemiology and operations research, policy dialogue, drug management and regulation, drug use and practices, maternal health and antenatal care, communication/behavior change, performance improvement, monitoring and evaluation; and the implementation of pilot interventions.

It is expected that the MAC will make substantial contributions toward policy revision and implementation throughout malaria-endemic Africa. USAID expects to fund the MAC workplan for at least five years and a total of US\$40-50 million.

Other bilaterals have also been active in RBM. These particularly include Australia, Belgium, Canada, Germany, Italy, Japan, Luxembourg, the Netherlands and Norway. The contributions of these other bilaterals are small at the present time in relation to DFID and USAID, but could grow as their confidence in and co-ownership of RBM improves.

All partners believe that the strong participation in Roll Back Malaria of the European Commission (EC) is extremely important. In practice this has not yet happened. The Evaluation Team met with EC officials in Cambodia who take part in the Regional Malaria Control

Programme in Cambodia, Laos and Vietnam, a five and a half year project sponsored by the EC with a budget of 32 million Euros. This significant involvement by the EC in the Mekong region will end in December 2002, further fuelling concerns among partners that its commitment to malaria control is not firm.

2.3.6 Regional Development Banks

The African Development Bank (AfDB) was the only one of the regional development banks contacted by the Team during the course of the evaluation. The emerging role of the AfDB in assisting in disease prevention and control in the region is noteworthy. Recognizing the socio-economic impact of malaria and its linkages to poverty, the AfDB adopted a Health Sector Policy in 1996 that identified malaria as one of the major diseases in Africa requiring priority investments. The main thrust of the policy is primary health care development, with priority given to disease control (e.g. malaria, HIV/AIDS and tuberculosis) and systems development, with particular attention to health financing measures. Most projects appraised after 1997 have been designed in accordance with reformed and decentralized health care systems, emphasizing district health care management. Since 1999 AfDB has also pursued a multi-sectoral approach that attempts to make use of limited resources for health by incorporating targeted health components into non-health interventions (e.g. agriculture and rural development, water resources, education and population).

In May 2002 the AfDB Board approved the AfDB Malaria Control Strategy paper, which was developed with the assistance of the RBM Secretariat and two Regional Offices, AFRO and EMRO. Annex M provides an executive summary of the Malaria Control Strategy and a table of past Bank investments related to malaria control.

2.3.7 Governments

At the country level, government is the key member of the partnership. Without strong commitment and proactive approaches by governments, little can succeed. Some governments clearly are committed and proactive, and the Abuja Summit undoubtedly stimulated this commitment. Others, such as Tanzania, are not. Box 14 gives a snapshot of malaria in Tanzania.

Especially in countries with a large malaria burden (mainly in Africa) some governments have not assimilated the new messages from RBM concerning the ability to reduce malaria and the strategies for doing so. The Evaluation Team was surprised to learn that senior government officials may share the fatalism towards malaria that is commonplace in African villages. They may also have not yet embraced the four-part strategy for malaria control that the evidence suggests and that RBM has promoted. It was noticeable that when senior government officials talked about malaria control, they talked mainly in terms of environmental measures. They referred to clearing undergrowth around villages and improving drainage as the key interventions. Entomologists believe that these measures are ineffective in much of Africa (except in response to epidemics) due to the specific breeding patterns of *Anopheles gambiae*. This scientific information apparently has not yet been widely accepted in some government circles.

The Evaluation Team was struck by the way in which in Africa HIV/AIDS has come to dominate the health sector agenda in the past two or three years. Many senior Africans interviewed referred to this and indicated that much of their time was now devoted to dealing with HIV/AIDS and to responding to donors and external agencies pushing for greater activity in the field of HIV/AIDS. Governments can only cope with a small number of high priorities, and it was clear that the attention given to HIV/AIDS has decreased the attention given to malaria. An irony in this situation, perceived by some officials, is that unlike HIV/AIDS there are a set of tried and tested interventions for malaria which, if applied on a large scale, could reduce the malaria burden substantially within a few years.

Box 14

From Planning and Studying to Action in Tanzania

Malaria is one of the leading health problems in Tanzania. It is responsible for perhaps a quarter of child deaths and is a major cause of morbidity in adults. Over 40 percent of hospital attendance is due to malaria.

Chronic and severe weaknesses with the health care infrastructure limit the effectiveness of the therapeutic response:

- only 11 percent of clinical staff have had recent training on malaria case management;
- only about half of children receive the correct diagnosis and treatment at health facilities;
- only 11 percent of children treated at home receive appropriate treatment;
- only 29 percent of pregnant women are receiving IPT;
- 71 percent of health facilities have run out of the first-line drug (chloroquine) for at least one week in the last three months.

Knowledge in the community concerning malaria is not high, suggesting the need for greatly increased efforts in communication. Many people go to drug stores or traditional healers when they or their children have fever, suggesting the need for much greater efforts to encourage appropriate responses through the private sector.

Bednets are widely available (Box 5) and increasingly used. However, use of ITNs and the re-treatment of existing nets remain rare.

Tanzania is fortunate in having a considerable cadre of professionals who are knowledgeable about malaria. Tanzania also has the largest and most active malaria research community in Africa, and a comprehensive and thoughtful CSP for 2002-2007. The challenge in Tanzania is to move boldly from studying and planning to effective action on a national scale.

2.4 Financing

Expenditure on malaria worldwide from international sources in 1998 was in the order of \$64 million per year. This was made up of:

- \$2.4 million from WHO;
- \$22 to \$24 million in disbursements from the World Bank;
- \$2 to \$3 million in procurements of bednets and insecticide from UNICEF;
- \$1 to \$2 million in disbursements from the African Development Bank;
- approximately \$10 million in spending by USAID; and
- \$26 to \$29 million from other sources.

For many of these sources, especially the development banks, these estimates rely on identifiable direct or earmarked expenditures on malaria. Expenditures that benefit malaria control activities indirectly, such as spending on communicable diseases more broadly and/or health sector strengthening, are not reflected in these estimates. Also, these estimates of course do not include the very substantial expenditure by countries themselves on malaria control. These national expenditures include expenditures by central and local government and expenditures by households and individuals on preventing and treating malaria. In most developing countries, these private expenditures exceed government expenditures. In some countries, particularly in Asia, the private expenditures are at least three times higher.

International transfers for malaria control in the year 2002 will be approximately \$130 million, a two-fold increase from 1998. Once again, this estimate does not include national expenditures. It also does not include expenditures of separate funds held by AFRO, or anticipated increases in expenditure by the European Commission on RBM. These estimates also do not include

expenditure on malaria research, estimated by the Wellcome Trust in 1993 to be \$84 million per year.

Table 4 Estimated International Expenditures on Malaria in 2002	
Sources	Amount (\$ million)
1. Through RBM	
- From WHO	8.7
- From bilaterals	25.7
- From multilaterals	1.0
Total through RBM	35.4
2. Outside RBM	
- From bilaterals	54.3
- From multilaterals	37.5
- From NGOs	3.3
Total outside RBM	95.1
3. Grand Total	130.5

The expenditure estimates for 2002 are set out in Table 4. Around 28 percent of total spending flows through the RBM Secretariat and WHO Regional and Country offices. The remaining 72 percent of total spending is channeled directly to countries by bilaterals and multilaterals. An estimated 55 percent of total RBM Secretariat spending goes directly to support country-level programmes.

The World Bank contributed nearly half of total spending on malaria in 1998 (approximately \$22-24 million of the \$67 million total), and USAID contributed a quarter of the total amount (approximately \$10 million). In 2002, spending by the multilateral agencies is estimated at one-fifth of total projected spending (at approximately \$37 million), and bilateral contributions are expected to rise to over 60 percent of total spending (or \$80 million).

Of this external financial assistance, large sums go toward commodity purchases. In 1999, World Bank projects for which procurement information¹⁷ is available allocated 62 percent of total spending to insecticides, 16 percent to drugs (especially chloroquine and SP), and the remainder to bednets and other items. These expenditures seem skewed in the light of the fact that use of insecticides, other than on bednets, is not a key strategy for RBM. The apparent inconsistency, however, may derive from the World Bank being the donor of last resort and picking up items that other donors prefer not to fund. The data could also be unrepresentative and may be reflecting unduly the large World Bank malaria project in India (see Annex E).

There was little evidence that the RBM Partnership has influenced the funding decisions of individual partners. Table 3 shows the breakdown of funding to African countries as channelled through the RBM Secretariat or major bilateral and multilateral donors. Although only ten

¹⁷ The study which reached these conclusions only looked at purchases (e.g. drugs, nets, insecticides) which were large enough to justify the Bank's review and therefore was unable to assess the amount of resources directed toward supervision, studies, facilities, supplies, training or consultants. Also, any purchase of anti-malarials which falls into the procurement category of 'essential drugs' will not have been captured by this study.

countries in Africa captured over 70 percent (i.e. \$50 million) of direct-to-country investments in Africa, this does not appear to be due to the coordinated activities of partners. (The ten countries are: Eritrea, Ethiopia, Kenya, Malawi, Mozambique, Nigeria, Senegal, Tanzania, Uganda and Zambia). Nonetheless, the individual partners have tended to concentrate their efforts on a small number of countries. Well over half of USAID's spending in 2002 was directed toward six countries. Three African countries captured three quarters of DFID's spending. The vast majority of World Bank disbursements (high estimate) went to seven countries. By comparison, funding channeled through the RBM Secretariat and the WHO regional and country offices were less concentrated, reaching all countries in Africa except six. 53 percent of these funds went to ten countries.

WHO Geneva and its Regional Offices contribute approximate 25 percent of total annual spending on RBM (nearly \$9 million). Approximately \$3.3 million of this amount goes to support country activities. Bilateral support to the RBM Secretariat is projected to be over 70 percent of the \$35 million total spending on RBM in 2002. Most of this (nearly 80 percent) is contributed by two bilaterals – DFID and USAID. Another 15 percent is contributed by Italy and Japan. Other bilateral donors to RBM in 2002 include Australia, Belgium, Canada, Germany, Luxembourg, the Netherlands and Norway. The World Bank contributes \$1.5 million annually to the RBM Secretariat through the Development Grant Facility; \$0.5 million supports the RBM Secretariat in Geneva and the other \$1 million goes to RBM AFRO.

Annual per capita external funding for malaria in Africa amounts to approximately \$0.07 - \$0.08. The Commission on Macroeconomics and Health has estimated that the *additional* annual investment per capita required for effective malaria control is \$0.6 by the year 2007 and \$0.9 by the year 2015 (in terms of the 2002 value of the dollar). These annual per capita expenditures are over and above both the existing international expenditures, which we have estimated here, and the existing national expenditures, which we have not attempted to estimate. If the Commission on Macroeconomics and Health has got its sums right, this indicates that the levels of resource allocation, from both national and international sources, must be increased very substantially if Abuja and Millennium goals are to be met.

The estimates presented here are very rough and incomplete. There is no system in place for tracking either international or national expenditures on malaria control. It would be extremely difficult in practice to put such a system in place. In the case of the development banks, of which the World Bank is the most important in regard to malaria financing, disbursement rates lag well behind commitments and are difficult to track. Projects disburse particularly slowly in their early years (Box 12 and Annex E), and some projects close with substantial undisbursed funds.

For both multilateral and bilateral funding it is extremely difficult in practice to tease out malaria funding from broader communicable disease or health sector funding. On occasion there may be malaria projects. More typically, there are disease control projects or broader health sector projects with malaria components. Even more difficult to account for is funding that may support malaria indirectly through the support of an allied project such as IMCI, or through support for general infrastructure development, such as primary care strengthening or supporting the establishment of systems for disease surveillance. Yet another twist in these complexities is the case in which technical assistance specifically for malaria is funded through another project, such as a communications project. Once again these investments do not show up as malaria investments in the accounting systems of the agencies and are extremely laborious to identify after the event.

In summary, the figures that we present here tell an interesting story, but are in no way reliable or comprehensive. They probably underestimate the level of international financial flows for malaria-related activities, and they contain no estimates of the much larger national expenditures (both public and private) on malaria. Annex F provides more detail on the assumptions and data that underlie this section.

2.5 Communications and Advocacy

Communications and advocacy are essential to the success of RBM. These activities are currently driven by the Communications and Advocacy Team (CAT) of RBM at WHO headquarters. CAT has until now not been an effective or sufficient response to the substantial needs in the field of communication. CAT is regarded as a support rather than a technical unit and is understaffed in relation to the scale and scope of the communication needs. Because of the demands upon it to supply materials, CAT operates in a reactive rather than proactive mode. The three essential needs for communication to ensure the success of RBM are:

- facilitating partner coordination, including sharing technical information and best practice;
- global advocacy; and
- guiding and assisting country programmes with communications.

These areas are reviewed briefly in turn below.

2.5.1 Partner Coordination

A good flow of information within and among partners and country programmes would enable the RBM Partnership to function more effectively. Ideally, all partners and country programmes should be able to find out the latest technical advice and programmatically useful information, know what other partners are doing and planning, and learn from each other's experiences. Current communication practices fall well short of this ideal.

Available documents on ITNs or drug policy tend to be detailed, complex and turgid. Sharing of local best practice seems simply not to be happening, and little is known about countries' experiences with programmatic strategies to deliver the priority interventions. During all its travels and interviews, the Evaluation Team met with very few people outside Cambodia who were aware of the innovative nature of some of the interventions being used in that country (see Box 6). Similarly, many people in Tanzania, never mind in other countries, were unaware of the pioneering research and local implementation efforts that are ongoing in Ifakara and other sites in that country. These experiences need to be much more widely shared and be the subject of lively debate.

2.5.2 Advocacy

The most successful advocacy event to date has been the Abuja Summit. The Summit provided a clear articulation of the RBM strategy and objectives, obtained support for those objectives from African Heads of State, and mobilized some of them to accomplish a specific action – reduction of tariffs and taxes. However, there has been insufficient systematic follow up.

2.5.3 Communication at the Country Level

At present, RBM is falling short of realizing the potential for using communications approaches to energize country efforts. There are two areas where communications expertise is needed to guide and assist national programmes: advocacy and promoting key interventions.

Country level advocacy

The importance of advocacy at the country level was underscored during the Evaluation Team's visit to Tanzania, where senior staff in the Ministries of Health and Finance and in the Prime Minister's Office do not recognize the importance of malaria or know the most effective interventions to control it. Advocacy strategies and activities to inform and engage gatekeeper officials and Ministry staff (including District staff) are urgently needed there, and probably in many other countries as well. Other groups who should be engaged in RBM and who might be

audiences for advocacy efforts include vendors of nets, insecticide and medicines, local politicians, health professionals of all types, and leaders of community-based organizations.

Country level promotion of the priority interventions

A review of CSPs reveals the most important gap in communication associated with RBM: the lack of comprehensive strategies for national promotion of the RBM priority interventions. (This is also related to the lack of fully developed programmatic strategies to deliver the priority interventions.) The fundamental nature of this gap is confirmed by the failure of the RBM situation analysis to mandate the collection of even the basic data relevant to national communication strategies (for example the proportion of people who can be reached using radio or television, or literacy rates in different languages).

Some countries are promoting nets and appropriate treatment, but few are using mass media and promotion on a national scale or with the intensity necessary to raise awareness. Few if any countries are linking interventions.¹⁸ National malaria control programmes tend to focus on each of the RBM interventions as an independent activity, and are apt to rely on implementation through the public sector or NGOs. These approaches do not address the need for large-scale, nationwide implementation through the private sector.

2.6 Human Resources and Capacity Development

RBM faces tremendous bottlenecks in the area of human resources and capacity development that seriously interfere with its ability to roll back malaria. In many countries, especially in Africa, human resources and capacity are a leading or the leading constraint preventing the effective implementation of national programmes in malaria control.

The Strategic Plan for Capacity Development, drafted in July 2000 and endorsed by several countries at the 2001 Abuja Conference, represents an important first step taken by RBM to address the problem at global, regional and country levels. The document lays the foundation for a flexible and creative approach to capacity development, emphasizing the importance of effective policies and systems. It advocates an innovative approach to training, including distance learning, apprenticeships and mentoring, and demonstration projects in addition to standard training practices. It recognizes the need for linking RBM efforts to other global programmes and partnerships. It encourages skills development in both the public and private sectors, and in health and non-health sectors.

At the country level, there are examples of important achievements in capacity development and training. According to the Internal Evaluation report, almost all NMCP managers within the AFRO and EMRO regions, and many other central and district level staff, have been trained on two to three month courses on malaria control planning and management. Also, training guidelines on treating severe malaria are widely used in Africa. Nonetheless, much of the work actually undertaken at country level continues to emphasize more traditional training and technically focused practices.

Unfortunately, the Strategic Plan appears to have had little impact on projects undertaken by the RBM Secretariat or at the level of country and regional programmes. The emphasis continues to be on training. Reliable data on the human resource requirements for scaling up RBM do not exist in any country visited by the Evaluation team. (However, the Cambodian Ministry of Health is currently developing a database to assist as a planning tool to address human resource constraints in priority health areas.) Furthermore, there appears to be little creative thinking on how RBM

¹⁸ An example of a message that links the interventions: “When your child has a fever, give her SP; to reduce the number of times she has fever, make sure she sleeps under a treated net.”

can move forward in selected countries, in the short term, notwithstanding current constraints on human resources and capacity.

In fact, donors and government officials at the country level expressed a high degree of dissatisfaction over current methods used to fill gaps in human resource capacity, such as ‘topping up’ salaries. Although necessary from a short-term perspective, many observers commented on their potentially harmful impact in terms of skewed incentives and harming worker morale. In Cambodia rural health posts and hospitals where wages are very low are frequently unable to retain staff. Meanwhile, trainers contracted by the national malaria control programme and WHO are compensated for a single day of work at levels higher than a full month’s income for rural workers.

These problems are not unique to RBM. Human resource constraints are felt across all sectors and across all programmes within the health sector. However, the Evaluation team felt that RBM’s relatively unfocused efforts in this area, and its narrow emphasis on training activities, have allowed the problem to fester in the context of the most severe crisis in human resources and capacity in history (in the African region).

2.7 Research

RBM promotes and finances its own operational research and also interacts with others who promote and finance a broad range of malaria research, from the most operational to the most fundamental. Particularly important interactions include:

- ❑ Collaboration with developing country research sites where operational, epidemiological and clinical research is conducted. Prominent examples are to be found in countries such as Gambia, Tanzania, Thailand and Vietnam.
- ❑ Collaboration with TDR and with the Multilateral Initiative on Malaria (MIM), an international collaboration headquartered till the end of 2002 at the Fogarty Center at the NIH in Bethesda.
- ❑ Collaboration with the two major initiatives for the development of malaria drugs and vaccines, Medicines for Malaria Venture (MMV) and Malaria Vaccine Initiative (MVI).

These collaborations can be roughly divided into those that have short-term implications and those that have longer-term implications. Both forms of collaboration are important, but in terms of reaching the objectives in Phase II of RBM, it is the former that are especially important. RBM has great need for high quality operational, epidemiological, public health and clinical research that will help guide its policies and recommendations and the activities that are taking place in focus countries. The operational research requires a strong social science component, including anthropology, economics, political science and communications. This has not been sufficiently emphasized hitherto.

The Evaluation Team did not examine relationships between RBM and the various research groups and organizations in any detail. The general impression was gained that these relationships could be improved and probably were improving. The new leadership at TDR is committed to close and appropriate relationships with RBM and is also committed to allocating significant TDR resources to operational research.

The longer-term relationships with bodies such as MMV and MVI are equally important, but less urgent. It is important that RBM is fully aware of drugs and vaccines that may be in the pipeline. It is also important that field experience and insight is fed into the drug and vaccine development process. Without this the optimal drugs and vaccines may not be developed, or their compliance requirements or packaging may be inappropriate for the circumstances in the most affected countries in Africa.

It was noted that relationships between MIM (which has emphasized laboratory-based malaria research in Africa) and RBM were good. There have been RBM/MIM joint workshops. It was commented that African malaria researchers do not see a distinction between malaria control and malaria research, and that the two enterprises work easily together.

It is important that RBM does not try to control the agenda of its research partners, but that there is a good working relationship with them. It is also important that RBM appreciates the need for research, and this was widely thought to be the case. Some commentators contrasted the somewhat defensive view about research that they observed in the Stop TB Initiative with the more embracing view of research displayed by RBM. It was emphasized that it does not undermine the credibility of current recommendations to also call for more research and for the development of better tools. It is essential that RBM draw on the best expertise and the best evidence from around the world in formulating its technical recommendations. Annex G provides a more comprehensive account of the malaria research environment and research priorities.

2.8 Monitoring and Evaluation

USAID commissioned a separate evaluation of the RBM monitoring and evaluation system (M&E). This work was conducted by Kate Macintyre, Erin Eckert and Amara Robinson of Tulane University and the JSI Research and Training Institute. The complete executive summary from this report is reproduced in Annex H.

Progress with M&E in the first few years of RBM has been disappointing. A lack of focus has prevailed. No database exists for tracking global trends in malaria. Most countries in Africa do not have baseline data on measures of infant and child mortality. There is no vision for developing a set of indicators to measure the socio-economic impact of malaria (e.g. costs to the health sector, costs to households and communities, overall economic burden in terms of productivity, sick days, etc.).

Progress that has been achieved has often taken place without adequate RBM coordination. For example, UNICEF has independently collected data on two critical parameters: percentage of children sleeping under ITNs and percentage of children under five receiving appropriate treatment for malaria within 24 hours of the onset of illness, in 35 countries, using the Multiple Indicator Cluster Survey (MICS).

The main problem affecting RBM's data collection efforts, as explained in Annex H, has been that an overly complex and insufficiently prescriptive approach has been taken. There has been a failure to clearly define goals and priorities of the M&E strategy at the global and regional levels, leading to confusion and *ad hoc* data collection efforts at the country level. Too many indicators are proposed. Too many sources of data are suggested. Insufficient guidance is given to countries on data collection and methodology. Insufficient attention is given to precise denominators and to ensuring that the data are representative of some known population. Local autonomy in data collection and use are emphasized (and there are good reasons for this) but the consequence is a muddle. Some countries are measuring one thing, some countries are measuring another. Where countries believe they are measuring the same thing, the data are often not strictly comparable because different sampling methodologies have been used. In some cases, data are being collected without any systematic and scientific sampling methodology, and so are essentially meaningless and impossible to interpret.

The root causes of the problem are multiple, but they are aggravated by a lack of strategic focus and vision at the Secretariat level. As the independent M&E evaluation perceptively states, "RBM is caught between the stated goal of helping countries develop their monitoring systems and the demand to produce accurate and timely tracking for the overall initiative." Progress will prove elusive if this tension is left unresolved, but there are factors that contribute to the lack of

strategic focus and resolve. There is confusion about roles and responsibilities among the several parts of WHO that have some involvement in M&E for RBM. There is also serious under-capacity in some places, notably in WHO AFRO.

It is certainly the case that the history of M&E in malaria is short relative to that of other diseases, and RBM cannot have been expected to solve all data problems in a short amount of time. Yet the urgency is real. Without the ability to measure reliably and comparably a small number of indicators, both of process and outcome, there is no way that RBM can keep on track or know if it is on track or not. If not quickly corrected, the problem is likely to undermine RBM's contributions to two major international initiatives. It will have little to contribute toward the international effort to track progress on the MDGs in the area of malaria, and it will not be able to provide the type of assistance that it should to the Global Fund. (The Fund needs to rely on RBM for the measurement of milestones and progress if it is to be, as intended, a performance-based funding mechanism. See Section 3.6).

2.9 The Malaria Burden

Due to the inadequacies in the systems available for M&E, referred to in Section 2.8, it is not possible to know with any certainty how the malaria burden has changed during the first three years of RBM. However, anecdotal evidence and the strong consensus among experts suggests that, at the very least, the malaria burden has not decreased. What is more likely, and believed to be the case by most of those involved, is that malaria has got somewhat worse during this period.

This worsening of malaria over the past few years has three distinct dimensions. Firstly, there is evidence that in some endemic areas transmission, morbidity and mortality may have increased. The reasons for this are multiple. Increase in resistance of mosquitoes to insecticides and parasites to drugs has clearly played a role.¹⁹ In addition, changing habitats, settlement patterns and population densities can all increase malaria transmission in endemic areas. For example, increased settlement in forest fringe areas, as in Cambodia, increases the number of people exposed to malaria and consequently the malaria burden.

A second important dimension of increased burden relates to complex emergencies. In countries or parts of countries where civil order has broken down and where emergency conditions have been imposed by strife or natural disaster, malaria thrives. The separate report on Malaria in Complex Emergencies, commissioned by USAID, is summarized elsewhere in this report (Section 2.10).

Thirdly, with changing settlement patterns and in the absence of effective control programmes, malaria has been pushing outwards and expanding the endemic zone. There is both a latitude and an altitude component to this expansion. With regard to latitude, malaria is tending to move northwards in the Sahel and southwards in South Africa. Concerning altitude, there are many reports that malaria transmission is found at higher altitudes than previously. This phenomenon is particularly seen in the upland areas of East Africa. This is caused in part by increasing settlement at higher altitudes caused by population pressure and the exploitation of new land for agricultural and other purposes. There may also be a biological component, relating to the adaptation of mosquitoes to be effective vectors at higher altitudes.

It was never expected by the core partners that the burden of malaria would be reduced in the first three years of RBM. However, it is noteworthy that the burden has probably worsened over this period. It increases the sense of challenge and difficulty on the road ahead. It is not only

¹⁹ Recent data from Senegal suggest that resistance to chloroquine increases the risk of malaria death in children <10 years by 2.1, 2.5 and 5.5-fold in Sahel, Savanna and forest areas respectively (Trape *et al.*, 1998).

necessary for RBM to halt this increase, but to reverse it and to demonstrate a reduction in the burden of malaria. This can be achieved both by decreasing the burden in highly affected countries and also by halting and reversing the outwards and upwards spread of the endemic. These complementary strategies are further discussed in Sections 4.1 and 4.2.

2.10 Complex Emergencies

Complex emergencies (CE) were the subject of a separate evaluation commissioned by USAID. The final report of this evaluation was not available to the Evaluation Team at the time this main report was going to press. Annex I reproduces a draft Executive Summary of this separate evaluation.

RBM-CE differs from the main body of RBM in three important ways:

- its array of donors;
- its key implementing partners; and
- its potential array of technical interventions.

Concerning partners, the parts of major bilaterals such as DFID and USAID that deal with emergencies are distinct from those parts that are dealing with ongoing health sector assistance. In addition, there are important players in complex emergencies, such as the Office of the United Nations High Commissioner for Refugees (UNHCR), the World Food Programme (WFP) and the US Bureau of Population, Refugees and Migration, which are not at all involved in other RBM activity.

On the ground, the partners that are active and effective in complex emergencies are different from those engaged in the long-term support of NMCPs. In complex emergencies, it is the NGOs that are the most prominent and effective. WHO is an international agency owned and directed by governments, and governments are often, at least in part, the cause of complex emergencies. This makes WHO's role intrinsically difficult.

The principle objective of interventions in emergency situations is to reduce the mortality rate of the affected population to the pre-emergency levels as rapidly as possible. To achieve this, different measures may have to be implemented from those which are recommended in more stable and more developmental situations.

Specific examples of the above include the appropriateness, in some situations, of using indoor residual spraying as a short-term measure to reduce malaria transmission while other measures are being put in place. Similarly, in an emergency situation it might be appropriate to use a new and expensive drug to achieve rapidly a large mortality reduction in a small population. This might be justified even if that drug was not appropriate for widespread use as the first-line drug for the NMCP.

Notably, RBM-CE has pushed ahead in some areas of applied research. This includes the development and use of factory treated bednets, and the development and use of insecticide-impregnated plastic sheeting. This plastic sheeting is much used in emergencies to provide temporary shelter.

2.11 The Changing Context

During Phase I of RBM, the period 1998 to 2002, the context in which RBM operates has changed significantly. These changes involve both matters directly affecting malaria control, and changes in the broader context in which malaria control takes place.

2.11.1 The Changing Malaria Context

A number of significant events have occurred that directly impinge on malaria control activity. Some of these are listed below.

- ❑ The resistance of parasites to drugs and vectors to insecticides has increased in most or all countries since 1998. This has considerable implications for the choice of drugs and insecticides, two of the most important and difficult issues faced by NMCPs.
- ❑ Significant technical advances have been made in the early years of RBM. RBM has contributed to these technical advances and to disseminating information about them. Advances include the development and trial of combination therapies, the development and use of individual net treatments, the early development of long-lasting nets, and the greater acceptance and experience with intermittent presumptive treatment of pregnant women.
- ❑ Commodities required for malaria control are more widely manufactured and available. These include a variety of drugs, with different forms of packaging, and nets. For example, there are now three manufacturers of nets in Tanzania, supplying the needs of that country and exporting to other countries in Africa and elsewhere.
- ❑ Research on malaria has increased during the period and the evidence from research has strengthened. This research ranges from the malaria genome²⁰ and other fundamental biological discoveries through to the most applied operational research. This research, either in the long term or the short term, will greatly benefit the efforts of RBM.
- ❑ Lastly, two major research enterprises have been established during the first years of RBM. The first, the Medicines for Malaria Venture (MMV), is dedicated to the discovery and production of new malaria drugs. The second, the Malaria Vaccine Initiative (MVI), is dedicated to the discovery and production of malaria vaccines. In addition, a number of major companies have independently pursued and accelerated their work on the development and testing of new drugs and vaccines.

In summary, these developments are very significant. They provide an exciting environment for RBM to increase its effectiveness and to make full use of the fruits of technological advance and research. They also provide a challenge for RBM. Because of changing resistance and the results of research the recommended global and local strategies keep changing. It is a demanding task to keep abreast of all this information and to be able to offer the best technical advice to a particular country at a particular time. While it is generally true that communicable disease control is a moving target and recommendations have constantly to be updated in the light of changing epidemiology and biology and the fruits of research, these changes are particularly rapid and important in the case of malaria.

2.11.2 The Broader Environment

As with the proximal environment described above, the broader environment has also changed dramatically during the first few years of RBM. A few significant events are discussed below.

- ❑ Budget support, SWAp and basket funding have become accepted and commonplace. Donors, with the exception of USAID and a few others, are increasingly providing their health sector support, not through individual projects but by contributions to a basket of funds in the context of a SWAp. The NMCPs must compete with other priorities and programmes for its appropriate share of the basket within the SWAp.

²⁰ By late 2002 or early 2003, the full genomes of *Plasmodium falciparum*, *P. vivax* and other plasmodium species will have been sequenced. In addition, the genomic sequence of *Anopheles gambiae* – the main vector in Africa – is expected soon.

[Note: The genome sequence of *Plasmodium falciparum* has now been published, in: The malaria genome – and beyond. *Nature*, 3 October 2002 (Plasmodium genomics special issue)]

- PRSP, PRSC, PRBS, and HIPC²¹ programmes and processes have proliferated over the past several years. These poverty-related funding mechanisms nearly always specify health as a priority objective and a number of them go further and specify malaria as a priority within the health sector (see Box 15). Building malaria into the priorities of these programmes and obtaining and making use of these funds when they are available has become a new and different challenge for those seeking to finance NMCPs.

Box 15 **The PRSP in Tanzania**

The Poverty Reduction Strategy Paper (PRSP) in Tanzania was published in October 2000, and gives priority to health, education, water, judiciary, agriculture and roads. The health goal is to "arrest the decline in life expectancy (owing to the impact of HIV/AIDS), and then raise it to 52 years by the year 2010.". This will be achieved in part by reducing under-five mortality rates from 158 to 127 per thousand by 2003. A further goal is to reduce the proportion of mortality caused by malaria from 12.8 percent to 10 percent by 2003.

In August 2001 the government produced its first progress report on the PRSP. Progress in the first year concerning malaria is stated as follows: "New guidelines have been developed and distributed, training of trainers has been completed, and drugs have been ordered." It is also noted that the coverage by IMCI has increased from 17 to 31 districts.

The report envisages an increase in the budget for malaria prevention and control from around 1 billion Tanzanian shillings (TSh) in 2001/2002 to TSh2 billion in 2002/2003. During the same period, the total expenditure on primary care will stay constant at around TSh100 billion, while the total health sector budget will increase from TSh139 billion to TSh222 billion. Overall health sector spending will increase from 0.4 percent of GDP in 1998/99 to 1.3 percent in 2000/2001.

It is remarkable that one of Tanzania's leading causes of death, and the greatest killer of Tanzanian children, should be allocated such a small fraction of the primary health care and total health budgets. However, other budget lines, especially that for drugs, contain finance for the prevention and treatment of malaria.

Out of a total national budget in 2000/2001 of TSh1490 billion, TSh222 billion come from the Poverty Reduction Budget Support Programme (PRBS) and related sources and a further TSh57 billion from HIPC relief. Thus PRSP-related sources make a significant contribution to the ability of the Tanzanian Government to spend on malaria and other priorities.

- HIV/AIDS has come to dominate the health sector agenda, particularly in Africa. It was clear to the Evaluation Team that this has made it more difficult in some countries to create and sustain the necessary sense of priority and urgency for malaria.
- The Global Fund to Fight AIDS, TB and Malaria (The Global Fund) has been born and is in the process of making its first financial allocations. The Global Fund is a significant new source of malaria funding and changes the context in which RBM works in many countries.
- The Commission on Macroeconomics and Health (CMH) has reported in December 2001. The CMH gave priority to the control of a small number of major killing diseases. Malaria was prominent among these. The CMH called for greatly increased investments, both national and international, in malaria control. These arguments should strengthen commitment and the availability of funds.

²¹ PRSPs (Poverty Reduction Strategy Papers) provide the basis for expenditure plans under PRSCs (Poverty Reduction Strategy Credits), PRBSs (Poverty Reduction Budget Support Programmes) and HICPs (Debt Initiative for Heavily Indebted Poor Countries).

- Lastly, since 1998 the somewhat disappointing evidence on aid effectiveness has become available and issues of good governance have become more prominent in the debates concerning economic and social development. This affects RBM in the context of country selectivity. The climate of evidence and opinion is now more supportive of concentrating efforts on countries where there is good governance and ability to make solid progress in the short term. This approach was further strengthened by the discussions at the recent Conference on Development Finance in Monterey, Mexico.

Taken together, these factors represent a significant shift in the broader environment in the first few years of the life of RBM. Again, they present both opportunities and challenges. The opportunities come from the enhanced political commitment and availability of international finance. The challenges come from the need to fully exploit these new opportunities. For example, SWAps, PRSPs and HIPCs are complicated and most people who work in malaria do not yet understand them or have the necessary skills to exploit them to the advantage of RBM. This understanding and skill is needed quickly. Some lessons for RBM's future involvement may be drawn from the experience of the Joint United Nations Programme on HIV/AIDS (UNAIDS) in dealing with these issues (Box 16).

Box 16 **Dropping the Ball on PRSPs and HIPCs**

The Poverty Reduction Strategy Paper (PRSP) in Tanzania was published in October 2000, and gives priority to health, education, water, judiciary, agriculture and roads. The health goal is to "arrest the decline in life expectancy (owing to the impact of HIV/AIDS), and then raise it to 52 years by the year 2010.". This will be achieved in part by reducing under-five mortality rates from 158 to 127 per thousand by 2003. A further goal is to reduce the proportion of mortality caused by malaria from 12.8 percent to 10 percent by 2003.

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2.12 Was RBM Needed?

The Evaluation Team was presented with the question of whether RBM should have been established in the first place and whether there was a need and purpose for it. The answer is an unequivocal 'yes'.

The failures since the 1950s, and the widespread despondency concerning malaria that they generated, left many countries in a situation where malaria was gradually worsening and nothing much was being done about it. Resistance was rising, transmission was increasing, control programmes had fallen into disrepair, and a general mood of fatalism concerning malaria existed.

At the same time, research and experiences with control at the local level were demonstrating that the right strategies applied in the right way could rapidly reduce the burden of mortality due to malaria. Particularly striking, in this regard, was the research in the mid- and late-1990s on insecticide-treated bednets. Studies from the Gambia, Tanzania and elsewhere, showed that under five mortality could be reduced by as much as one-third when impregnated nets were introduced and appropriately used. The magnitude of this impact was a big surprise, and is still not fully understood. It did, however, send a message that there is something that we can do and that it is not very complicated or expensive.

In some countries, particularly those in South-East Asia and Latin America, the fruits of this new research and experience were being taken up and applied in NMCPs, even prior to the creation of RBM. This would have continued and been successful even if RBM had not been created. However, in the worst affected countries, mainly those in Africa, this was not occurring and would not have occurred without the African Initiative on Malaria Control and, subsequently, RBM. The despondency was too deep and the technical and logistical problems too great for there to have been a major counter attack on malaria in the absence of a strong global programme that would strengthen political commitment, mobilize resources and provide technical support at the country level.

Some have argued that RBM should not have been launched because the problems in Africa are too intractable and the tools and technologies are not adequate to reduce significantly the malaria burden. The great majority of experts, together with the External Evaluation Team, disagree with this position. The tools and strategies that are available are indeed adequate to reduce significantly the malaria burden. In addition, RBM is in an excellent position to test and make use of new tools and strategies as they become available as a result of research. Indeed, one of the justifications of RBM was and remains that it will be a magnet for research and a place where the results of research can be quickly tried and, if successful, utilized on a large scale. These technical issues in malaria control are reviewed comprehensively in Annex J.

2.13 Is RBM Still Needed?

Roll Back Malaria has been enormously successful in some important areas in Phase I. The Partnership has created 'value-added' at the global level through advocacy, resource mobilization and identification of tools and interventions. The whole being greater than the sum of its parts, the overall impact of RBM is greater because partners are seen to be acting in concert, greatly raising the profile of their activities.

A different, though equally important, principle applies to the value created by efficiency gains. Some data needs to be collected only once, and a global M&E system helps to minimize duplication and overlap. There are many examples of this type of gain.

However, the Evaluation Team found that the 'value-added' potential of the Partnership has not been fully realized at the country level. In countries, the uncoordinated actions of partners add up to less than wished for in terms of overall impact. The Team's assessment was that especially at country level, the 'loose ties' arrangements upon which RBM was constructed have proven counter-productive. While the 'loose ties' are not directly responsible for many of the weaknesses identified by the Evaluation Team, they do explain why the Partnership has been unable to act quickly and decisively to correct these weaknesses.

2.14 Is RBM Well Positioned for Phase II?

The sections of Chapter 2, above, make the answer to this question abundantly clear. It is 'no'.

RBM has some notable achievements to its credit. It is not, however, well placed to effectively meet the challenges of Phase II. During Phase II it is essential to create quickly (say within the next three to five years) significant and measurable reductions in the malaria burden in a

meaningful number of countries. The current functioning of RBM, both at the global and country levels, is not adequate to fulfil this mission. Chapter 3 sets out the changes in RBM that are necessary and recommended in order for RBM to be well positioned for success in Phase II.