



**The World Bank
Booster Program
for Malaria Control
in Africa**

Scaling-Up for Impact (SUFI)
A Two-Year Progress Report



OCTOBER 2007



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Contents

Acknowledgements	3
Foreword	4
Part I: Executive Summary	6
Part II: Background on Malaria	13
<i>Country Profiles</i>	
Malawi	14
Burkina Faso	20
Nigeria	23
Benin	26
Part III: Progress	28
<i>Country Profiles</i>	
Zambia	32
Tanzania	34
Eritrea	39
Senegal	41
Ethiopia	42
Democratic Republic of Congo	45
Senegal River Basin	47
Part IV: Challenges and Solutions	49
<i>Country Profiles</i>	
Ghana	52
Niger	55
Kenya	57
Sudan	58
Part V: Looking Ahead	61
References	63
Photo Credits	64

Glossary Of Acronyms

ACT:	artemisinin-based combination therapy
BMGF:	Bill & Melinda Gates Foundation
Global Fund:	The Global Fund to fight AIDS, Tuberculosis and Malaria
IDA:	International Development Association
IEC/BCC:	Information, Education, and Communication and Behavior Change Communication
IPT:	intermittent preventive treatment
IRS:	indoor residual spraying
HWG:	Harmonization Working Group
ITN:	insecticide-treated net
LLIN:	long lasting insecticidal net
M&E:	Monitoring and Evaluation
MACEPA:	Malaria Control and Evaluation Program in Africa
MDG:	Millennium Development Goal
MERG:	Monitoring and Evaluation Reference Group
MIRT:	Malaria Implementation Resource Team
NGO:	Non-governmental organization
NMCP:	National Malaria Control Program
ORT:	oral rehydration therapy
PMI:	(United States) President's Malaria Initiative
RBM:	Roll Back Malaria
SUFI:	Scaling-Up for Impact
SWAp:	Sector-Wide Approach
U5:	child under age 5
UNICEF:	United Nations Children's Fund
USAID:	United States Agency for International Development
USG:	United States Government
WHO:	World Health Organization

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This report was prepared by the
Malaria Implementation Resource Team,
Africa Region, World Bank



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Acknowledgements

The Malaria Implementation Resource Team would like to acknowledge the tremendous support received from several colleagues, institutions and agencies during the design, development and implementation of the Booster Program for Malaria Control in Africa. While an exhaustive list is not feasible, we would like to draw attention to those whose support made the Booster Program possible.

First of all, we would like to thank our colleagues and friends in the Roll Back Malaria (RBM) Partnership and Secretariat led by Professor Awa Marie Coll-Seck—this includes our technical and donor partners in the RBM Partnership, as well as the staff of the Partnership Secretariat itself. The RBM contribution has been critical in ensuring that the Booster Program adds value to the implementation of national malaria control strategic plans across the African continent.

Within the Bank Group, we would like to salute the work of the dedicated Task Team Leaders, Sector Managers and Country Directors of our Booster Program countries. They form the front line of the Bank's efforts, and without them, there would be no Booster Program. Strong leadership from Yaw Ansu (Director, Human Development, Africa Region) was instrumental in the design and implementation of the Program.

The Program also benefited from advice received from Hartwig Schafer (Director of Operations, Africa Region), as well as the region's procurement team led by V.S. Krishnakumar (Manager, Africa Region Procurement), the regional integration team led by Mark D. Tomlinson (Director, Africa Regional Integration), and the communications team led by Marco Mantovanelli (former Senior Communications Adviser, Africa Region) and John Donaldson (Senior External Affairs Counsellor). Our colleagues from the Bank's Human Development Network, especially Phil Hay (Communications Advisor), and Olusoji Adeyi (Coordinator, Public Health Programs), who provide our team with unwavering support, for which we are most grateful. In addition, we would like to express our gratitude for the support, attention and drive for results from the Office of the President.

Most importantly, we would like to extend our appreciation to our national counterparts in Booster Program countries. They have stepped up to lead an unprecedented movement to control this treatable and preventable disease.

Africa is beginning to bring malaria under control and we are in the midst of one of the greatest public health efforts being led by the countries themselves. As we move together into the next phase of the Program, we stand ready to support our colleagues and friends working at the country-level in their efforts so that future generations can live malaria-free.

Foreword:

A Word from our Africa Region Leadership

The World Bank Booster Program for Malaria Control in Africa was established in September 2005 to assist African governments in scaling-up effective interventions to bring malaria under control on the continent. After two years, the Booster Program has made marked and positive progress, but there is still much to be done to defeat this preventable and treatable disease.

Malaria is a resilient, relentless foe that continues to ravage entire countries in Africa; the challenges associated with ensuring and maintaining significant levels of malaria control are enormous. Each year brings more than 500 million new malaria cases worldwide and about 1 million people die annually from the disease, 90 percent of them in Africa. It remains a leading cause of child mortality in endemic areas. As Rwandan Ambassador H.E. James Kimonyo rightly said, “Malaria affects the entire development process of a country.” It has a negative impact on national economies, education systems and maternal health.

Malaria control is central to the World Bank’s development agenda. In the World Bank’s Africa Region, we have developed the “Africa Action Plan,” a prioritized framework for the Bank to help tackle some of the continent’s most pressing development concerns. The reduction of child mortality is a key pillar of this plan, and we are aware that this simply will not be achieved without a focused and significant effort to control malaria. As a result, we remain steadfast in the

commitment we made years ago when we co-founded the Roll Back Malaria Partnership to cut malaria deaths in Africa by 75 percent by 2015 through partnership with countries, other donors and advocates.

Working closely with the other large funders of malaria operations in Africa, the Global Fund to Fight AIDS, Tuberculosis and Malaria and the U.S. President’s Malaria Initiative, the Booster Program is taking decisive steps to ensure that African countries quickly get the effective treatments, mosquito bednets, indoor residual spraying and other essential interventions needed to save lives and control the disease. At the same time, we are working with participating countries to strengthen their health systems. Indeed, the Booster Program has a two-pronged approach: scaling-up effective malaria control interventions while providing support to health systems in key areas such as supply chain management and procurement, monitoring and evaluation as well as strategic planning. This dual approach is essential to achieving rapid but sustainable malaria control in Africa and is a documented lesson-learned from the World Bank’s approach in the 1990s.

We also are helping to infuse the critical elements of measurement, accountability and results into country malaria control plans and initiatives. These elements will help all involved in malaria control to understand if and why we are succeeding.

We offer the Booster Program Progress Report as an update of our progress to date and the recognized challenges ahead. Two years into the effort and in response to robust country demand, we have increased World Bank financing for malaria control in Africa more than nine-fold. Nineteen malaria control projects in 18 countries, including a sub-regional project—totaling just over US\$450 million—are funded, under preparation or underway. We are clear on our mission—but are far from completing it.

Our actions are guided and inspired by the collective wisdom of our partners in the fight against malaria. The essence of our endeavor was aptly characterized by Professor Awa Marie Coll-Seck, Executive Director, Roll Back Malaria Partnership, who said, “Achieving sustainable malaria control will take both a tremendous ability to lead and a willingness by many different partners to collaborate and coordinate their efforts. This willingness must be long term. The lives of more than a million people each year depend on it.”

In this spirit of long-term collaboration, we offer our report of progress to date and ask all partners to stand fast beside us during the fight to come. Together, we can work toward an Africa free of malaria.

Obiageli Ezekwesili

Vice President

World Bank Africa Region

Yaw Ansu

Director, Human Development

World Bank Africa Region

Maryse B. Pierre-Louis

Coordinator, Booster Program for

Malaria Control in Africa

World Bank Africa Region



Part I: Executive Summary

“We must all learn to stay the course until our mission of a world free of malaria is accomplished. Together with our partners we need to support countries to achieve control of malaria, and keep it controlled.”

—Obiageli Ezekwesili
Vice President,
World Bank Africa Region

Every year, malaria infects more than 500 million people around the world. The burden is highest in Africa, where more than 90 percent of the world’s approximately 1 million malaria deaths occur annually. Children in many parts of Africa suffer from malaria about four times each year and it is one of the leading causes of child deaths on the continent, yet the disease is completely preventable and treatable.¹

The impact of the disease extends far beyond the health of victims. Malaria exacts a broad toll on human and economic prosperity, from direct prevention and treatment costs to lost wages and suffering by individuals, to diminished workforce productivity, to broader market inefficiencies that then curtail trade and investment. In total, malaria is estimated to cost Africa about US\$12 billion annually in lost gross domestic product (GDP), slowing GDP growth by as much as 1.3 percent per year.²

While staggering, none of these malaria facts is new—certainly not to generations of Africans who continue to suffer from the disease. What is new is that malaria control in Africa has reached a crossroad: effective interventions to control the disease now exist but must be provided on a scale to benefit all who need them.

In April 2005, the World Bank released its revised malaria control framework: the Global Strategy and Booster Program. Through consultative discussions with client governments, development partners in the Roll Back Malaria (RBM) Partnership, a World Bank vice-presidential steering committee (comprised of five World Bank vice presidents) and the Bank’s Board of Executive Directors, the Bank found that efforts had fallen far short of expectations and earlier promises made at the RBM Abuja Summit in 2000. The Bank devel-

oped a new strategy outlining a way forward for the institution, including suggestions for a substantial increase in financing from the International Development Association (IDA), the arm of the World Bank that provides interest-free loans and grants to the world's poorest countries. Malaria was deemed to be a fundamental obstacle to human and economic development, especially in Africa. It also was reconized that achieving many of the Millennium Development Goals would be challenging, if not impossible, without its control.

Following the release of the global strategy, the Booster Program for Malaria Control in Africa was launched in September 2005 translating the global strategy into a results-focused effort to bring the disease under control on the continent. Through this program, the World Bank brought to the fight a long-term commitment and pledged to leverage its unique relationships with ministries of health and of finance in participating countries, as well as its convening power with donor countries. The Booster Program has a ten-year horizon and we established a target of US\$500 million in IDA resources for Phase I of the Booster Program (July 2005–June 2008) to support the rapid scale-up of proven malaria interventions in approximately 20 countries through tailored designs aimed at supporting national malaria control programs.

As a founding member of the RBM Partnership, the Bank through the Booster Program for Malaria Control in Africa seeks to contribute to the joint efforts of countries and partners in reaching the coverage targets—“Abuja Targets.”* As the Booster Program supports national malaria control strategic plans, the Bank's role is one of partner, along with organizations that work to-

* The Abuja targets were originally set for 2005, a schedule which proved very difficult to achieve in most countries. Broadly speaking, the Abuja targets call for at least 60 percent utilization of effective malaria prevention and treatment. At the World Health Assembly in May 2005, the Abuja targets set for 2005 were revised for 2010 to ensure that at least 80 percent of those at risk of, or suffering from, malaria benefit from major preventive and curative interventions.



Part I: Executive Summary



gether with countries to achieve the targets of their national malaria control plans.

One of the underlying principles that has fueled the rapid demand for IDA resources under the Booster Program has been a desire by client countries to “front-load” malaria control efforts. Unlike many other public health problems, malaria cannot be satisfactorily controlled with incremental approaches, largely because its vectors are too efficient. Successful malaria control requires bold, decisive steps to obtain widespread coverage of key proven malaria-control interventions quickly, followed by a phase where those gains are sustained through recurrent public health services. This concept of a heavy up-front effort as opposed to a more incremental approach has been termed “Scaling-Up for Impact” or “SUFU” in the development community.

The Booster Program for Malaria Control in Africa is driven by five key components which are discussed in detail throughout this report:

1. It is country led, seeking to contribute to—not orchestrate—plans developed by the affected countries themselves. Countries that choose to participate in the Booster Program reallocate part of their resources from their IDA envelopes, putting that sum toward malaria control. With countries taking the lead role in malaria control and prioritizing their own resources, there is increased accountability on the part of participating countries and a greater likelihood of sustainability.
2. It emphasizes both effective scale-up of interventions and the strengthening of health systems. This dual strategy helps to distribute urgently needed medicines and bednets and simultaneously builds health system capacity for long-term sustainability.

3. It operates through partnerships. Partnerships are at the core of the Booster Program and are critical to the successful control of malaria in Africa. The Booster Program is firmly embedded within the RBM Partnership, to which the World Bank remains fully committed.
4. It provides flexible, cross-border and multi-sector funding. These funding mechanisms allow for a rapid scale-up of proven interventions, as well as the ability to react to unforeseen circumstances.
5. It monitors results against monies spent. Insufficient data and poor monitoring and evaluation have been critical constraints to assessing progress and maintaining accountability. The program is working with partners to strengthen monitoring and evaluation (M&E) efforts at global, regional and country levels. Baseline data has been collected in Booster Program countries and areas where projects have begun implementation. In addition, every Booster Program project has a comprehensive monitoring and evaluation component tailored to the national context. At global level, the World Bank has developed a Malaria Scorecard for tracking dollar investments and coverage progress for key interventions, such as the use of insecticide-treated bed nets, access to anti-malarial treatment for children, intermittent preventive treatment for pregnant women and indoor residual spraying. We are currently working with our RBM partners to transform this scorecard into a joint accountability framework.

Over the past two years, the World Bank, participating countries and partners have witnessed many signs of success and progress due to our collaboration.

Thus far, there are 15 Booster Program projects in 16 countries that are Board-approved and



two multi-donor trust funds in Sudan as well as two additional projects under preparation, totaling 19 projects in 18 countries. Board-approved projects include the multi-country Senegal River Basin Booster project as well as a US\$180 million malaria control funding package for Nigeria which is currently the largest malaria control effort in the country. The Booster Program's total commitments for malaria control through these projects will reach at least US\$452.1 million by June of 2008. **This reflects a nine-fold increase in World Bank funding for malaria control in Africa (from less than US\$50 million) since the beginning of the Booster Program just two years ago.**

By the end of 2007, the World Bank expects that Booster Program funds will help distribute nearly 20 million long lasting insecticidal nets (LLINs) and more than 15 million doses of artemisinin-based combination therapy (ACT). In total, more than 21 million LLINs and 42 million

Part I: Executive Summary

doses of ACT will be distributed under projects in the Booster Program's first phase. **About 240 million people—including more than 42 million children under age 5 and nearly 10 million pregnant women—are in areas covered by the approved Booster Program projects.** The Booster Program is also financing indoor residual spraying where appropriate, as well as capacity building to strengthen country health systems (primarily procurement and supply chain management and M&E).

Due in part to the efforts of the Booster Program, countries and regions are closing gaps in their health systems and employing effective malaria control interventions and treatment strategies. Countries are benefiting from increased funding that is more flexible.

Not only have the monies been allocated, but they are being spent on cost-effective and technically-sound malaria control interventions. The World Health Organization's (WHO) Global Malaria Program has certified that interventions and activities supported by the Booster Program are in line with WHO policies and standards.

A funding gap is likely preventing full Scale-Up for Impact: The annual funding needed to control malaria in Africa has recently been estimated at as much as US\$2.2 billion per year.¹ The U.S. Government, the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and the World Bank are the three largest malaria control donors to Africa and collaborate closely as part of the RBM Partnership. These three donors have approximately US\$2.5–2.8 billion in total commitments between them to be spent over the next 4–5 years for malaria control in Africa, or about US\$500 million per year. This leaves a critical gap in financing of approximately US\$1.7 billion per year over the next five years to bring malaria under control in sub-Saharan Africa.

While more intensive efforts are now underway in the RBM Partnership to quantify the needs (financial and technical) of what is required to control malaria, this number serves as a useful reminder that substantially more resources are necessary to bring the disease under control in Africa. The early successes in some countries suggest that existing resources are beginning to yield concrete results. The Booster Program is working with partners, and encouraging emerging donors, to ensure that resources are available to accelerate and sustain progress.

While strides have been made, much work remains to be done: additional funding sources must be identified, and current donors must continue their commitments; supply-chain and distribution issues must be overcome, and long-term solutions to eliminate malaria as a disease of public health importance from the continent must be implemented and maintained.

Looking Ahead

As we enter the final year of Phase I of the Booster Program, there are some important lessons that are beginning to emerge, prompting key questions from clients, partners and Bank staff, to be addressed as we move forward:

- IDA envelope constraints as well as constraints in other partner resources have led to the design of programs that have been limited in size and scope in several countries, resulting in a possible “sprinkling effect” at country level. Indeed, in most countries, despite already significant resources mobilized by all partners, national coverage has yet to become a reality. How many countries are really on course to achieve “Scale-Up for Impact” with this current approach?

- We have taken advantage of the Bank’s comparative advantages in innovative financing, cross-sectoral projects and regional support (like the Senegal River Basin Project), but we have not exploited them enough, particularly given the cross-border and cross-sector issues that must be addressed in order to have a major impact at the continental level on this public health threat. The Booster Program is light-years ahead of where we were 24 months ago, but in addition to country support, should taking better advantage of regional approaches be envisaged?
- A major impetus is still needed on monitoring and evaluation: (a) full, high-level consensus around high-level results tracking has yet to be achieved; and (b) despite efforts, significant attention to M&E at the country level is still required. How can we better work together to improve the way we approach M&E both globally and at the country-level?

One key question facing the Bank, our partners, and countries is whether or not we are satisfied with the current progress that is being made through incremental, country-by-country gains. Should we capitalize on the unique opportunity and momentum that currently exists globally and consider a continental approach to bring malaria under control?

As the Honorable Minister of Health of Ethiopia, Dr. Tedros Adhanom Ghebreyesus, recently said, “To truly bring malaria under control, we must begin to treat Africa as an island. We’ve made remarkable progress in some countries over the past few years, but many are being left behind. Malaria does not respect borders, and it’s time we find a way to eliminate malaria as a public health

threat across Africa, building on the good work that individual countries are doing. We need to take the nets and drugs to a continental scale, and quickly, to break the back of transmission in Africa and free up scarce resources in the health system to tackle other pressing concerns.”

Early progress in Eritrea, Zambia, Rwanda and Ethiopia in bringing malaria under control is confirming the global RBM Partnership hypothesis offered at the start of the Booster Program and the RBM Partnership more broadly: Malaria control is possible in the sub-Saharan African context.

We invite you to read the “World Bank Booster Program for Malaria Control in Africa: A Two-Year Progress Report” to learn more about the World Bank’s commitment to this global effort that can save millions of lives.





Part II: Background on Malaria

Malaria is transmitted from human to human by the female *Anopheles* mosquito. When a parasite-carrying mosquito bites a human, the infective parasite enters the bloodstream, and after developing and multiplying in the liver, quickly begins to invade and destroy the red blood cells of its human host.

Individuals most susceptible to the disease include pregnant women and their unborn babies, children, people infected with HIV/AIDS and non-immune adults (people from areas of Africa with no malaria, or travelers to the continent).

Because of malaria's devastating impact on the overall health and prosperity of Africa, it is addressed specifically in the United Nations Millennium Development Goals (MDGs), which reflect agreement on development priorities among nations and the leading development institutions. These goals have galvanized global efforts to meet the needs of the world's poorest countries and people.

Addressing malaria is crucial to meet many MDG targets:

Eradicate Extreme Poverty (MDG 1)

- Malaria keeps poor people poor. It has been estimated that approximately US\$12 billion per year may be lost in GDP due to the disease, consuming up to 25 percent of household incomes and 40 percent of government health spending.²⁻⁴ Malaria contributes to household poverty and stagnation of economic growth in a variety of ways—lost income for workers and reduced productivity in workers' personal and professional lives, and the negative economic impact of malaria is a deterrent to external investment and trade.^{2,5} For example, in the case of the Chad-Cameroon pipeline it was estimated that project delays attributable to malaria

“Despite medical advances that have produced many safe and effective malarial treatments, the disease is still a major cause of death and social and economic upheaval for millions around the world and particularly in Africa. Illness and death from malaria are particularly tragic because they are largely preventable and treatable. Combating malaria is an important poverty reduction strategy. If we can control it, many other health and economic issues can also be more adequately addressed.”

—Nils Daulaire
President & CEO,
Global Health Council



MALAWI

MALARIA IN MALAWI

Malaria is a leading cause of death in Malawi, with nearly the entire population of 13.9 million at risk of contracting the disease. Approximately 4 million cases attributable to malaria are registered in health facilities annually, and the disease is reported to account for 40 percent of inpatient visits and about 18 percent of all hospital deaths.

The government of Malawi is strongly committed to controlling malaria; Malawi was the first country in Africa to discontinue the use of chloroquine in favor of a more effective drug. However, efforts to combat the disease have faced many challenges, including: human resource constraints, parasite resistance to the first-line treatment that replaced chloroquine (Sulfadoxine-Pyrimethamine [SP], also known by the brand name Fansidar); inequities in access to malaria services; and a weak monitoring and evaluation system.

SUPPORT AND STRATEGIES

In response to the weak monitoring and evaluation system in Malawi, the World Bank proposed additional funding to the Health Sector Support Project (HSSP) to build monitoring and evaluation capacity and to improve management and decision making. This additional grant is meant to address a key constraint to in-

vestment in malaria and thereby leverage effective use of the significant resources in the HSSP, the Global Fund grant allocations for malaria and contributions from other partners such as the U.S. President's Malaria Initiative (PMI)—totaling approximately \$186 million for malaria control over the next three to five years.

A robust and sustainable monitoring and evaluation system will be built by strengthening and expanding the current Health Management Information Systems Unit into a Monitoring, Evaluation and Research Unit. The unit will ensure the effective use of resources by measuring the impact of the malaria program and its effect on other health outcomes and activities. It will also conduct studies and surveys to improve malaria management and provide data to inform policy decisions.

Because of the resistance to drugs such as chloroquine and SP, Malawi is in the midst of implementing a change to artemisinin-based combination therapies (ACTs)—a change that will be relatively costly (almost 10 times more expensive than the previous treatment protocol). PMI is largely supporting the country's transition to ACTs, and the World Bank's investment in monitoring and evaluation will help Malawi evaluate the impact of this change in treatment.

EXPECTED RESULTS

Through its strengthening of monitoring and evaluation systems and emphasis on improved results-based decision making, the additional grant will leverage funding from other partners to strengthen the delivery of malaria control and health services. It will therefore contribute to achieving the three Millennium Development Goals of reducing child mortality, improving maternal health and reducing poverty by protecting the poorest and the most vulnerable from economic loss due to ill health and disability.

Key indicators (most recent data)

Total population (2007)	13.9 million
Reported malaria cases (2002)	2.9 million
Households owning at least one ITN* (2006)	1.1 million (35.0 %)
Children under age 5 sleeping under ITN (2006)	563,400 (23.0 %)
World Bank commitment to malaria under Booster Program	US\$5 million
Board approval date	July 2006

*insecticide-treated net

could cost US\$4 million over the three-year construction phase.⁶

Achieve Universal Primary Education (MDG 2)

- Malaria is a leading cause of illness and absenteeism among students and teachers and impairs attendance and learning. For example, in Kenya, malaria has been estimated to account for 15–50 percent of school days missed from all preventable medical causes of absenteeism.⁷ Additionally, severe malaria and recurrent episodes of the disease, as well as malaria-related anemia, can result in cognitive impairment and reduced scholastic performance.

Reduce Child Mortality (MDG 4)

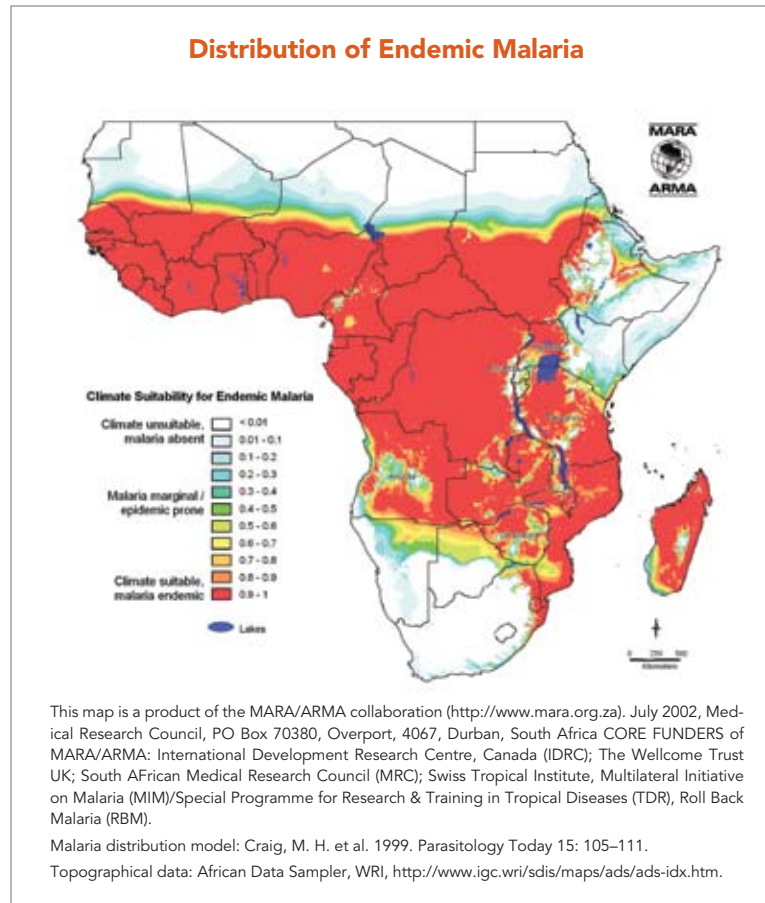
- Malaria is a leading cause of child mortality in Africa, estimated to directly contribute to nearly 20 percent of all child deaths.⁸

Improve Maternal Health (MDG 5)

- Malaria is four times more likely to strike pregnant women than other adults and has life-threatening implications for both mother and child.⁹ Acute malaria and malaria-related anemia pose a direct threat to healthy pregnancies and maternal health and contribute to adverse outcomes including premature and low birth-weight babies.¹⁰

Combat HIV/AIDS, Malaria and Other Diseases (MDG 6)

- Malaria morbidity and mortality remain a significant public health problem and also increase vulnerability to other diseases including HIV/AIDS and related health issues.¹¹



Ensure Environmental Sustainability (MDG 7)

- Projects that alter water use and settlement patterns can promote increased malaria transmission and exposure among populations that are immunologically naive to the disease.¹² Similarly the impact of climate change on malaria transmission is possibly already being felt in some countries.¹³

Provide Access to Affordable and Essential Drugs and Develop Global Partnership for Development (MDG 8)

- Malaria medicines are currently expensive and in short supply. The public-private partnerships currently under way to improve access to affordable malaria drugs can serve as a basis for improving access to other essential medicines.¹⁴

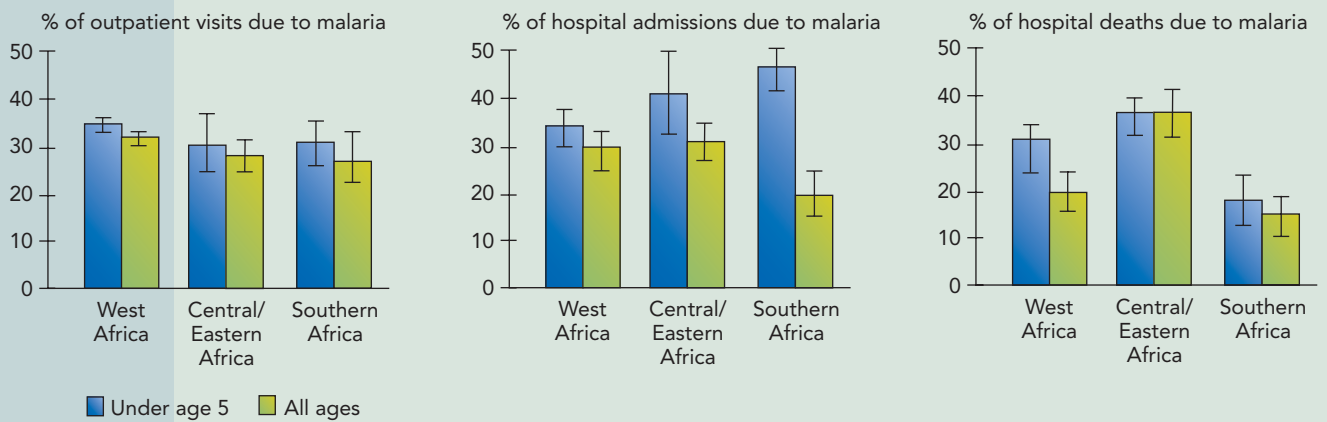
Part II: Background on Malaria

The Broader Impact of Malaria—A Drain on Health Systems and Other Sectors

Reducing Cases = Smart Investment: Reducing cases of malaria decreases the overwhelming burden on health systems and increases available health resources, facilities and health workers' time for tackling other health problems.

In Benin and Zambia, up to 40 percent of all outpatient attendance is due to malaria; if this could be slashed to 5 percent, significant monies would be saved, health care workers could spend additional time treating and controlling other diseases, and worker productivity would be dramatically increased. In the Senegal River Basin, malaria is a leading cause of child deaths and a significant cause of adult productivity loss, causing absenteeism during crucial harvest periods.

Malaria burden on health facilities



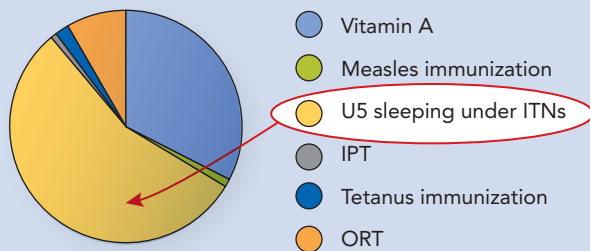
Source: AFRO routine Health Information System data. Averages 1998–2001. Error bars give the standard errors.

Malaria Control: A Key Driver of Mortality Reduction in Children Under Age 5

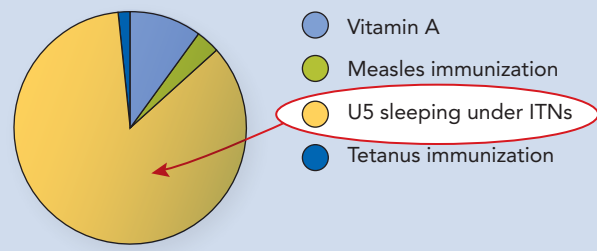
According to a 2005 UNICEF report, ITN use was the most effective among a “minimum” package of key interventions for reducing deaths of children under age 5.



Proportion of lives saved by key interventions in expansion districts



(Mali, Senegal, Ghana and Benin)



(Guinea-Bissau, Guinea Conakry, Gambia, Chad, Burkina Faso, Niger, Cameroon)

Children’s ITN use alone contributes >50% of the impact on mortality reduction in children under age 5.

IPT: intermittent preventive treatment, ITN: insecticide-treated net, ORT: oral rehydration therapy, U5: children under age 5

Source: UNICEF 2005, Accelerating Child Survival & Development—A Results-based Approach in High Under-5 Mortality Areas.

Part II: Background on Malaria

“Malaria places a significant burden not just on the individual who develops the disease, but also on their family, community, health system and the resources of their entire country. A growing number of countries in Africa are recognizing and addressing the broad impact of malaria through a national plan that includes a comprehensive, community-based approach, informed by civil society. Efforts focus on improving community-based access to long lasting insecticidal nets and appropriate treatments, combined with education and mobilization efforts to improve demand for and use of these products. A vast array of governmental, civil society and other partners, such as the World Bank, planning and working together, are making this approach doable.”

—Karen LeBan, CORE Group
Executive Director

The Booster Program for Malaria Control in Africa

In April 2005, the World Bank released its revised malaria control framework: the Global Strategy and Booster Program. Through consultative discussions with client governments, development partners in the Roll Back Malaria (RBM) Partnership, a World Bank vice-presidential steering committee (comprised of five World Bank vice presidents) and the Bank’s Board of Executive Directors, the Bank found that efforts had fallen far short of expectations and earlier promises made at the RBM Abuja Summit in 2000. The Bank developed a new strategy outlining a way forward for the institution, including suggestions for a substantial increase in financing from the International Development Association (IDA), the arm of the World Bank that provides interest-free loans and grants to the world’s poorest countries. Malaria was deemed to be a fundamental obstacle to human and economic development, especially in Africa. It was also reconized that achieving many of the Millenium Development Goals (MDGs) would be challenging without its control.

Soon after the publication of this report, the World Bank’s Africa Region, which is responsible for financing the Bank’s poverty reduction efforts in sub-Saharan Africa, launched the Booster Program for Malaria Control in Africa in September 2005 at a donor’s conference in Paris, France. Given the strong institutional commitment to the Booster Program, former World Bank Group President Paul Wolfowitz stated at the launch: “It is a sad fact that malaria kills an African child every 30 seconds despite the existence of methods to both prevent and cure the disease. We must act now before the malaria parasite adapts and grows resistant to the insecticides and drugs we have available to us today.” He went on to say,



“... additional donors and partners have joined this effort, including other development banks, donor countries, as well as the private sector, academia, NGOs and foundations. Despite very good intentions, malaria is as much of a threat today in Africa, if not worse. Obviously, we must do better.”

As a founding member of the RBM Partnership, the Bank through the Booster Program for Malaria Control in Africa seeks to contribute to the joint efforts of countries and partners in reaching the coverage targets established in Abuja, Nigeria, known as the “Abuja Targets.”* The Booster Program supports national malaria control strategic plans. Therefore, the Bank’s role is to serve as a partner and, in collaboration with other institutions and individuals, work with countries to achieve the targets of their national malaria control plans.

Booster Program Leadership by the Malaria Implementation Resource Team:

To coordinate the World Bank’s activities under the Booster Program, the Africa region established the Malaria Implementation Resource Team (MIRT) in November 2005. The team consists of a coordinator and four technical specialists. MIRT draws on expertise from various sectors and departments within the World Bank, and works with country task teams to prepare and oversee implementation of Booster Program projects. At the country level, World Bank task team leaders facilitate the dialogue with governments and assist them in developing and implementing Booster Program projects.

* The Abuja targets were originally set for 2005, a schedule which proved very difficult to achieve in most countries. Broadly speaking, the Abuja targets call for at least 60 percent utilization of effective malaria prevention and treatment. At the World Health Assembly in May 2005, the Abuja targets set for 2005 were revised for 2010 to ensure that at least 80 percent of those at risk of, or suffering from, malaria benefit from major preventive and curative interventions.



BURKINA FASO

MALARIA IN BURKINA FASO

All of Burkina Faso's 14.8 million citizens are at risk of malaria infection. It is a leading cause of child death, with only 7 percent of children sleeping under insecticide-treated nets today. If these nets were used by at least 60 percent of the population, it is estimated that child mortality would be cut by one-third.

SUPPORT AND STRATEGIES

In 2006, the World Bank approved five years of funding, totaling US\$47.7 million for the Health Sector Support and Multisector AIDS Project (HSSMAP). Through pooled funding with other donors, the project will support the National Health Development Plan and the National AIDS Strategy, contribute to improving the quality and utilization of maternal and child health services, support the expansion of malaria prevention and treatment activities at the community and district levels, and contribute to the improvement of the quality and coverage of treatment for HIV/AIDS and other sexually transmitted diseases.

Approximately US\$12 million will be allocated to purchase malaria control commodities and supplies.

To improve malaria prevention and treatment efforts, the HSSMAP, in coordination with the Roll Back Malaria (RBM) Partnership and the Booster Program, will focus on four priorities. They include:

- Scaling up coverage of insecticide-treated bed-nets from current levels by more than 60 percent by 2009;
- Purchasing effective malaria medicines, particularly for treating children and pregnant women;
- Strengthening district-level planning, implementation, monitoring and evaluation; and
- Developing a package of community-based health activities and promoting behavior change communications campaigns to support malaria control efforts.

EXPECTED RESULTS

Over the next four years, approximately US\$5 million of artemisinin-based combination therapies (ACTs) will be financed through the Booster Program project. While the amount is still insufficient for the population at risk, substantially more children will have access to highly subsidized ACTs, and through the RBM Partnership, the World Bank is supporting efforts by the Ministry of Health to access additional support from the Global Fund to fill the ACT gap. In addition, approximately 600,000 long lasting insecticidal nets are expected to be financed in 2007 alone, with support from the Booster Program.

Key indicators (most recent data)

Total population (2007)	14.8 million
Reported Malaria cases (2002)	1.5 million
Households owning at least one ITN* (2003)	92,600 (4.6%)
Children under age 5 sleeping under ITN (2003)	157,300 (6.5%)
World Bank commitment to malaria under Booster Program	US\$12 million
Board approval date	April 2006

*insecticide-treated net

The Booster Program has a 10-year horizon beginning with Phase I (three years). In this first phase about US\$500 million is expected to be allocated across 18–20 countries from IDA “envelopes” and Bank-managed trust funds to the fight against malaria (see sidebar at right). The Booster Program provides support for countries to mount collaborative, lasting efforts to control malaria by applying a combination of proven interventions, including the use of long lasting insecticidal nets (LLINs) and indoor residual spraying (IRS) where appropriate for prevention and artemisinin-based combination therapies (ACTs) for treatment. At the same time, in concert with our partners, the Booster Program works to support country efforts to design programs that will broadly strengthen their national health systems by, for example, strengthening procurement and supply-chain capacity, monitoring and evaluation, and strategic health planning.

From the beginning, the Booster Program has sought to build upon existing effective methods to establish a unique approach and continues to be driven by the following key features:

- 1. Country-led.** The Booster Program seeks to contribute to—not orchestrate—plans developed by the affected countries themselves. Countries that choose to participate in the Booster Program reallocate part of their resources from their IDA envelopes, putting that sum toward malaria control.* With countries taking the lead role in malaria control and prioritizing their own resources, there is increased accountability on the part of participating countries and a greater likelihood of sustainability.

* Sudan is an exception, where the Bank is not contributing IDA but is administering two multi-donor Trust Funds on behalf of other donors

International Development Association (IDA)

The International Development Association (IDA), a branch of the World Bank Group, funds programs that encourage economic growth and improve living conditions in some of the world’s poorest nations. IDA provides eligible countries “credits” in the form of interest-free loans and grants to make infrastructure improvements and provide basic social services for their citizens. In addition to providing funding for the Booster Program, IDA-funded projects support the construction and improvement of power plants, roads and dams, provide materials for classrooms as well as health clinics and enable the creation and implementation of programs related to other important diseases. To reduce the financial burden and strain on those countries not eligible for grants, IDA offers an extended payback timeline on loans of 35–40 years with no interest, augmented by a 10-year grace period.

IDA provides assistance to countries below a certain poverty level that demonstrate an ability to manage both their economies and any current IDA projects. IDA is one of the largest sources of assistance for the world’s 80+ poorest countries, 39 of which are in Africa. It is the single largest source of donor funds for basic social services in the poorest countries.

In 2007, 82 countries met the eligibility requirements. IDA has provided more than \$170 billion to 108 countries over a 10-year period. IDA-supported programs around the world are financing the infrastructure necessary to spark economic growth, raise the standard of living and provide the opportunities countries need to lift themselves out of poverty







COUNTRY PROFILE

NIGERIA

MALARIA IN NIGERIA

Nigeria has the largest population at risk of malaria in Africa, with the nation contributing as much as 30 percent of the continent's malarial burden. Malaria is the leading cause of sickness and death in the country and **no country in the world loses more children to malaria than Nigeria**. While tackling the disease in Nigeria is daunting, it is a challenge that can no longer be ignored.

SUPPORT AND STRATEGIES

At the request of the Nigerian government, the World Bank prepared a US\$180 million Booster Program project to benefit the populations at risk in seven of Nigeria's 36 states. The preparation process involved public and private sector partners who worked with federal, state and local officials to develop a revised Roll Back Malaria plan that forms the backbone of the Booster Program project in Nigeria. The project is delivering a well-defined package of key malaria and maternal and child health interventions (called the Malaria Plus Package or MPP) which is expected to have a greater impact on morbidity and mortality than a package of specific interventions alone at a moderate marginal cost.

The project aims to:

- **Strengthen the capacity of the federal government** to provide leadership and coordination for malaria control. It will support procurement and logistics systems to ensure a continuous supply of centrally procured commodities, including long lasting insecticidal nets (LLINs), essential drugs for treatment, and spray pumps and insecticide for indoor residual spraying (IRS). Rapid diagnostic tests will be evaluated in small pilot studies and then used more widely, if appropriate.
- **Address constraints in the health system at the state level** to improve delivery of malaria control interventions. States receive comprehensive support to rapidly extend coverage and use of LLINs which are free to children under age 5 and pregnant women, as well as increase access to and use of other priority

Key indicators (most recent data)

Total population (2007)	148.1 million
Reported malaria cases (2003)	2.6 million
Households owning at least one ITN* (2003)	592,500 (2.2%)
Children under age 5 sleeping under ITN* (2003)	279,800 (1.2%)
World Bank commitment to malaria under Booster Program	US\$180 million
Board approval date	December 2006

*insecticide-treated net

interventions such as free intermittent preventive treatment by pregnant women and indoor residual spraying as warranted. In addition the funding will support the mobilization of communities and families to reinforce utilization of prevention tools and the enhancement of social accountability between the states, local government, and the communities.

There also is a focus on expanding the appropriate use of artemisinin-based combination therapies (ACTs) through private sector medicine vendors, where most Nigerians access malaria treatment.

EXPECTED RESULTS

The Nigeria Booster Program project seeks to ensure that the target population has access to and uses an integrated and well-defined set of proven malaria interventions by strengthening the capacity of the federal and state governments to deliver them. The project will support the procurement of more than 6 million LLINs (of which 1.8 million have already been procured), 6 million ACT treatments and support IRS where appropriate.

While the funding support from the World Bank is significant, it only covers one-fifth of the states in Nigeria. Recent Global Fund and U.K. Department for International Development grants are covering additional states, but partners must work together to mobilize resources needed to bring this disease under control across the country.

Part II: Background on Malaria

- 2. A two-pronged approach that emphasizes rapid scale-up of interventions and strengthening of health systems** (see information box below). The Booster Program aims to strike the right balance between addressing systemic constraints—such as drug procurement and distribution issues, inadequate planning and poor monitoring and evaluation—and implementing disease-specific interventions. As long as malaria continues to impose a heavy burden on health systems, even the best-performing systems may be unable to keep up with the huge volumes of malaria cases, limiting their overall performance. “Health System” indicators such as reductions in child deaths are likely to remain stagnant without aggressive malaria control.
- 3. Driven through partnerships.** As part of its ongoing commitment to the RBM, the Booster Program works particularly closely with UNICEF, the U.N. Foundation, ExxonMobil, WHO, the U.S. Government (the U.S. President’s Malaria Initiative, USAID and CDC), the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Bill & Melinda Gates Foundation, Malaria No More, The CORE Group, the MACEPA Project and the Johns Hopkins VOICES Project as well as with other civil society, non-governmental, governmental and health and development organizations in the public and private sectors. This partnership approach is essential since, in every country plagued by malaria, no national budget or single donor contributes enough to bring malaria under control. Complementary efforts allow for more

Malaria Control Interventions

Artemisinin-based Combination Therapies (ACTs)

Artemisinin-based combination therapies (ACTs), made by combining compounds from the *artemisia annua* plant with various antimalarial partner drugs, are recognized by the World Health Organization and the scientific community as the most effective therapy to treat *falciparum malaria*, the predominant form of malaria in Africa and the most deadly. Unlike single drug therapies (monotherapy), the combination technique is expected to delay the development of drug-resistant strains of the disease. Furthermore, the treatment is active against gametocytes, the sexual stage of the parasite cycle, effectively reducing disease transmission. For these reasons, ACTs have become the first line of therapy for many countries struggling to control malaria infection and transmission. The treatment is fast-acting and produces minimal side effects, making it possible for patients to return quickly to their daily routines.

Long Lasting Insecticidal Nets (LLINs)

LLINs offer protection from malaria, and if used in enough households (at least 60–80 percent in an affected area), will assist in breaking the malaria transmission cycle, thus reducing the risk for all who live nearby. Woven from insecticide-bound fibers, the nets kill the potential disease carriers on contact and offer protection from bites. Unlike other insecticide-treated nets that require re-dipping every few months, LLINs’ slow-release design is effective for four to five years. The nets provide protection at night, when individuals are vulnerable and most likely to contract the disease. LLINs are safe for children, simple to hang up and offer lasting protection.

effective translation of funding into results. The Booster Program works with all malaria control donors to provide coordinated support to national malaria control plans and programs.

- 4. Provides flexible, cross-border and multi-sector funding.** The Booster Program provides flexible funding that allows for a rapid scale-up of proven interventions and facilitates malaria control across sectors and country borders in regions that have some of the world's highest malaria rates. This funding provides countries with the resources to build a vigorous treatment and prevention program through the procurement of artemisinin-based combination therapies (ACTs) and long lasting insecticidal nets (LLINs), insecticides for indoor-spraying and other commodities while strengthening their health care infrastructure.

- 5. Monitors results against monies spent.** Insufficient data along with weak monitoring and evaluation systems have been critical constraints to assessing progress and maintaining accountability. The Booster Program is working with partners to strengthen monitoring and evaluation (M&E) at global, regional and country levels. Baseline data has been collected in Booster Program countries and areas where projects have been implemented. In addition, every Booster Program project has a comprehensive monitoring and evaluation component tailored to the national context. At global level, the World Bank has developed a Malaria Scorecard for tracking dollar investments and coverage progress for key interventions, such as the use of insecticide-treated bed nets, access to anti-malarial treatment for children, intermittent preventive treatment for pregnant women and indoor residual spraying.

Indoor Residual Spraying (IRS)

Indoor residual spraying is the application of long-acting chemical insecticides (including DDT and other insecticides) on the walls and roofs of all houses and domestic animal shelters in a given area, in order to kill the adult mosquitoes that land and rest on these surfaces after feeding. The primary effects of indoor-residual spraying toward curtailing malaria transmission are: 1) to reduce the life span of vector mosquitoes so that they can no longer transmit malaria parasites from one person to another, and 2) to reduce the density of the vector mosquitoes.¹⁵

Intermittent Preventive Treatment (IPT)

Intermittent preventive treatment given to pregnant women at routine antenatal care visits has been shown to promote healthier pregnancies and yield benefits for both the mother and her developing fetus. IPT of malaria during pregnancy can significantly reduce the occurrence of low-birth-weight infants and maternal anemia.¹⁶ IPT in infants also may have a major role in malaria prevention at the public health level; however, additional research is needed to confirm this assumption.¹⁷



BENIN

MALARIA IN BENIN

Malaria is endemic throughout Benin and is transmitted during six to nine months of the year. It is the leading cause of child mortality; a recent estimate shows that between one-quarter and one-third of all child deaths in Benin were directly attributable to malaria.

SUPPORT AND STRATEGIES

The Booster Program has committed US\$31 million to support Benin's Roll Back Malaria (RBM) Partnership strategy for nationwide malaria control. There are four key components to the project:

- **Improving Case Management and Treatment Access:** Based on lessons learned from pilot studies, the government will improve treatment by rapidly phasing out chloroquine in favor of artemisinin-based combination therapies (ACTs).
- **Scaling up Prevention:** In 2007, a mass distribution campaign will provide long lasting insecticidal nets (LLINs) free of charge to children under age 5. Non-governmental and civil society organizations, especially those experienced in maternal

and child health activities, will conduct education campaigns that promote demand for and the effective use of LLINs and intermittent preventive treatment for pregnant women.

- **Strengthening Monitoring and Evaluation:** All partners and the government are committed to using a single, unified monitoring and evaluation system for the Benin RBM strategy. A monitoring and evaluation technical working group, chaired by the National Malaria Control Program, is being constituted with participation from the World Bank and other important partners, such as UNICEF, WHO and the U.S. President's Malaria Initiative (PMI).
- **Program Management, Capacity Development, and Regional Cooperation:** Benin will collaborate with its neighbors to identify opportunities for multi-country approaches to malaria control, as well as to explore sub-regional approaches to policy development, planning, monitoring and evaluation, operational research and training, and procurement and supply chain management.

EXPECTED RESULTS

The project aims to distribute about 1.7 million LLINs and treat about 3.7 million people—approximately 2.5 million children under age 5—with ACTs over the four-year life of the project. By the end of 2007, 1.4 million LLINs will be delivered to children under age 5, and a national malaria monitoring and evaluation framework and operational plan will have been developed and endorsed by the Ministry of Health. By the end of 2010, 300,000 pregnancies will have been made safer through improved antenatal care that includes distribution of LLINs to pregnant women and intermittent preventive treatment for malaria.

Key indicators (most recent data)

Total population (2007)	9.0 million
Reported malaria cases (2005)	929,124
Households owning at least one ITN* (2006)	2.1 million (24.5 %)
Children under age 5 sleeping under ITN (2006)	300,600 (20.2 %)
World Bank commitment to malaria under Booster Program	US\$31 million
Board approval date	June 2006

*insecticide-treated net



Part III: Progress

“Since 2005 when the World Bank launched its Malaria Booster Program, it agreed to provide millions of dollars to help countries scale-up malaria control. The World Bank took a bold step by admitting its past shortcomings and went further to commit significant additional resources, both human and financial, to develop a substantive country support program that adds value, is transparent, and for which it can be held accountable.”

—Eyitayo Lambo

Former Minister of Health of Nigeria and
Former Chair of the Roll Back Malaria Partnership

As recognized in the 2005 publication of the Global Strategy and Booster Program Report, the World Bank’s previous approach to malaria control in Africa was insufficient to achieve results. With less than US\$50 million of International Development Association (IDA) resources allocated across sub-Saharan Africa for malaria control from 2000–2005, the World Bank was unable to assist countries to achieve large scale malaria control impact.

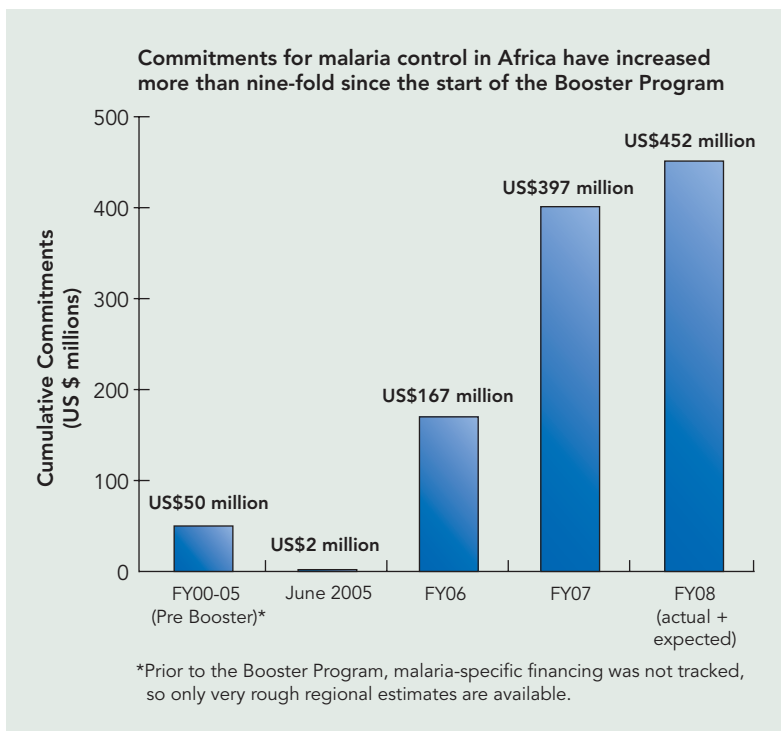
As noted in an external evaluation of Roll Back Malaria in 2002, “the Bank’s presumed comparative advantage in development policies, sector-wide planning and budgeting was inaccessible to the broader RBM partnership” due to the complexity of its processes, and due to many partners’ lack of familiarity with those processes; the reported impression of the Bank among other partners was that “it talks the talk, but in practice the Bank does not deliver on the ground.”¹⁸

Furthermore, in its 2005 Global Strategy and Booster Program report, the World Bank recognized that an incremental approach to malaria control, with an exclusive focus on health systems strengthening, had not delivered concrete health outcomes: “. . . health system constraints *alone* justify neither inaction nor a continuation of the inadequate level of the Bank’s commitment to malaria control.”¹⁹ Further, there is an evidence base demonstrating that, in disease control and public health, major interventions have worked on a large scale even in poor settings with grinding poverty and weak health systems.²⁰

These lessons were paramount when developing and implementing the Booster Program for Malaria Control in Africa.



Part III: Progress

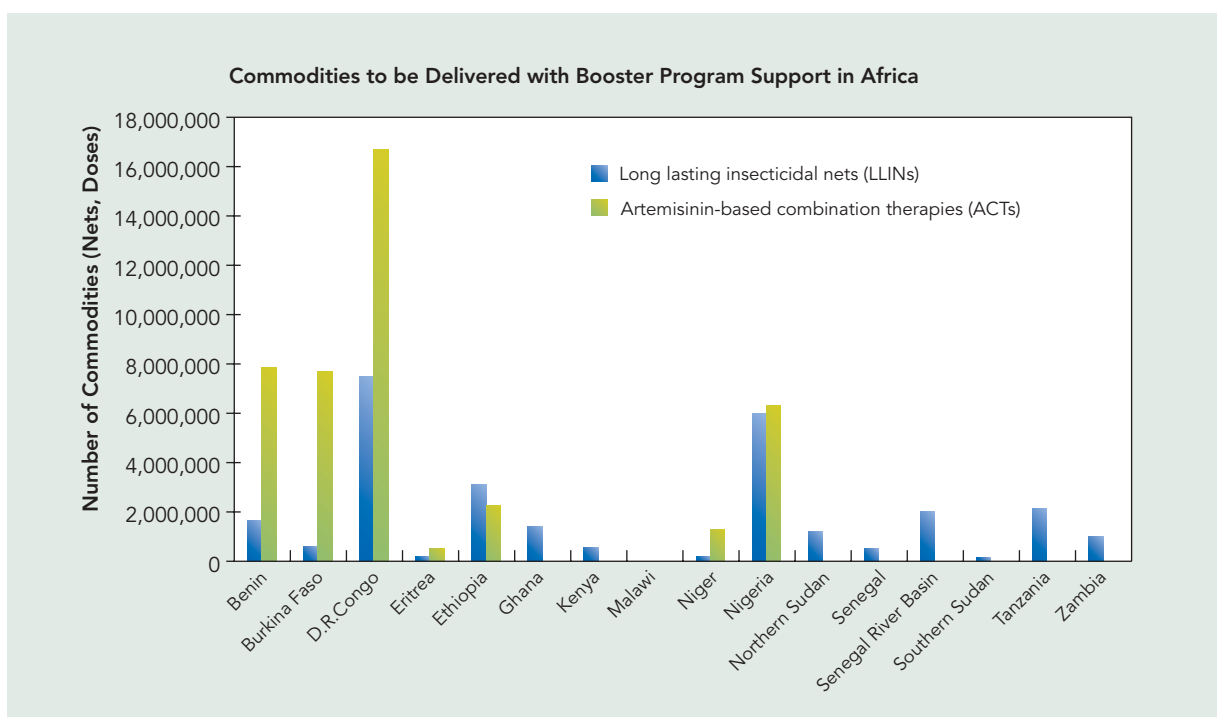


Backing Promises with Actions

The Booster Program has made significant progress in the following seven areas:

1. Allocating Money to the Fight Against Malaria

Recognizing the need to respond to country demands and build credibility as a lead malaria control partner, the Booster Program moved quickly to substantially increase resources for malaria control in Africa. IDA monies are demand-driven and generally allocated country-by-country; it was unclear at the start of the Booster Program whether or not country demand would meet the expectations and needs outlined in the Global Strategy. The World Bank's clients soon demonstrated that demand for IDA resources to control malaria was higher than the Bank expected. Using its unique



dual relationship with ministries of health and ministries of finance, the World Bank worked with each Booster Program country to make the case—in both human and economic terms—for increased government investment in long-term malaria control. **After two years, World Bank financing for malaria control in Africa has increased nine-fold (from less than US\$50 million to US\$450 million) with 18 countries making malaria control a priority in their development agendas.**

By the end of 2007 these Booster Program funds are expected to help distribute nearly 20 million long lasting insecticidal nets (LLINs) and provide more than 15 million doses of artemisinin-based combination therapy (ACT). The Bank also is financing indoor residual spraying where appropriate with DDT and other insecticides as well as capacity building efforts, primarily in procurement and supply chain management and monitoring and evaluation. In total, more than 21 million LLINs and 42 million doses of ACT will be distributed under projects in the Booster Program's first phase. About 240 million people—including more than 42 million children under age 5 and nearly 10 million pregnant women—are in areas covered by the Booster Program projects.

Today, in each Booster Program country, the Bank is not only providing additional resources to the fight against malaria, but is working with countries to ensure that funding is truly additional (as opposed to substituting for other resources) by monitoring the human and financial resources that countries are allocating to malaria control efforts.

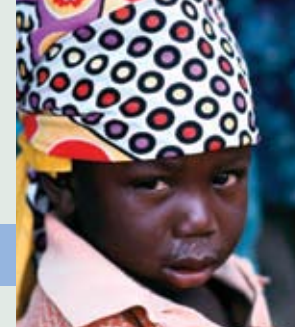
Status of Financing

Projects	Amount (US\$ million)	Board Dates
Eritrea	2	Jun 2005
D.R.Congo	30	Aug 2005
Zambia	20	Nov 2005
Niger	10	Jan 2006
Burkina Faso	12	Apr 2006
Ethiopia (MDG Trust Fund)	25	May 2006
Benin	31	Jun 2006
Senegal River Basin (Regional)	42	Jun 2006
Malawi	5	Jul 2006
Senegal	5	Nov 2006
Nigeria	180	Dec 2006
D.R.Congo (Emergency Urban and Social Rehabilitation Project)	13	Mar 2007
Ghana	10	Jul 2007
Tanzania	25	Jul 2007
Kenya	4	Jul 2007
Southern Sudan (MultiDonor TF)	16.5	N/A
Northern Sudan (MultiDonor TF)	1.2	N/A
TOTAL TO DATE	431.7 million	

FY 2008 Pipeline (indicative amounts subject to change)		
Kenya	10.4	TBD
Mozambique	10	TBD
TOTAL FY06–08	452.1 million	

2. Flexible and Multi-Sector Funding

The burden of malaria is felt far beyond the health sector and the disease does not respect national boundaries. The best example to date of how the World Bank has attempted to respond to this reality is the Senegal River Basin Booster Project, which is part of the larger Senegal River Basin Water-Resources Development Program project that covers the Basin population in Senegal, Mauritania, Mali and Guinea. This project highlights the World Bank's ability to work across sectors and coun-



ZAMBIA

MALARIA IN ZAMBIA

Zambia's entire population of 11.9 million is at risk of malaria, and pregnant women and children under age 5 are particularly vulnerable to the disease. Malaria is a major public health problem in Zambia and is estimated to account for 50,000 deaths and 37 percent of all outpatient visits in 2004. The National Malaria Control Program estimates that malaria drains GDP by 1 percent or more each year. In 2004, total malaria incidence fell, and the total number of reported deaths under the age of 5 also dropped to its lowest level in six years. It is too early to claim success, but these initial changes in impact suggest that progress is being made.

SUPPORT AND STRATEGIES

The government of Zambia has given high priority to addressing the morbidity and mortality associated with malaria. The World Bank supports the government in the implementation of the Zambia National Malaria Control Strategy through the Zambia Malaria Booster Project, a US\$20 million International Development Association (IDA) credit. The project combines malaria control activities with support to strengthen the health system for effective case management and community mobilization.

Partnerships play a key role in the success of the Booster Program, and in Zambia this is particularly apparent. The Zambia Malaria Control Strategic and Operational Plans serve as the core planning and coordinating tools for the World Bank and other partners operating in the country, including the Global Fund, the Bill & Melinda Gates Foundation-supported MACEPA project and U.S. President's Malaria Initiative.

EXPECTED RESULTS

Zambia is distributing more than 1.5 million long-lasting insecticidal nets (LLINs) and 1 million retreatment kits in 2007. Through the support of the Booster Program and other partners, Zambia aims to have 80 percent of its population covered by LLINs by 2008. Forty-four percent of households in Zambia now own at least one insecticide-treated net—up from less than 5 percent just three years ago. Although effective use of these nets (presently at about 22 percent) still lags behind ownership, it is expected to increase as a result of community mobilization activities under the Community Malaria Component of the Booster Program project. In addition, the project is expected to strengthen case management, human resources for health and procurement capacity within the Ministry of Health. With assistance from partner donors, Zambia has also scaled up the indoor residual spraying program, resulting in increased coverage of eligible households from 40 percent to 87 percent in 15 districts.

The government has taken full advantage of the flexibility of IDA in using Booster Program resources to fill unexpected gaps on its path to scale-up. As a result, the Booster Program project is on track to fully disburse its monies two years in advance, forcing the question of "what next?"

Key indicators (most recent data)

Total population (2007)	11.9 million
Reported malaria cases (2001)	2 million
Households owning at least one ITN* (2006)	998,700 (44.4%)
Children under age 5 sleeping under ITN (2006)	458,400 (22.8%)
World Bank commitment to malaria under Booster Program	US\$20 million
Board approval date	November 2005

*insecticide-treated net

tries in achieving malaria control. Other regional and multi-sectoral programs are expected to be developed beginning in 2008.

With regard to flexibility, the Booster Program has been able to respond to urgent requests for funding for malaria-control programs in several countries, including Tanzania, where an additional US\$25 million has been made available to expand free distribution of LLINs in response to a country-identified gap and in Zambia where the effects of delays in Global Fund financing for LLINs were reduced by “front loading” of the IDA credit. As long as activities are aligned with country national malaria control strategic plans, IDA proceeds can be reallocated to respond to gaps and needs as they emerge. Project design in the Booster Program has adhered to this principle. Rather than providing countries and World Bank Task Teams with a template, each country was allowed the flexibility to work with its Bank counterpart to design malaria-control support that was country-specific and tailored to country needs.

There has been no “one-size-fits-all” approach, and multiple World Bank project types have been used in designing Booster Projects. For instance, while some countries have chosen to develop “free-standing”^{*} malaria control projects (such as Zambia, Benin, and Nigeria), others have chosen to embed malaria control support within broader health sector operations. Both have been acceptable in Phase I. As part of options for Phase II, the Bank and its advisors are examining the pros and cons of

No “One-size-fits-all” Approach: Flexible Project Design to Control Malaria While Strengthening Health Systems

Country	Project Approach
Benin	Free-Standing Operation*
Burkina Faso	Health-Sector Support and Multi-sectoral AIDS Project
Democratic Republic of Congo (DRC)	Health Sector Rehabilitation Support Project/Emergency Urban and Social Rehabilitation Project
Eritrea	HIV/AIDS/STDs, TB, Malaria and Reproductive Health Project
Ethiopia (Millennium Development Goals Trust Fund)	Protection of Basic Services/MDG Fund
Ghana	Nutrition and Malaria Control for Child Survival Project
Kenya	HIV/AIDS Project
Malawi	Health-Sector-Wide Approach
Niger	Health-Sector-Wide Approach
Nigeria	Free-Standing Operation*
Senegal	Nutrition Project
Senegal River Basin (Regional)—Guinea, Mali, Mauritania and Senegal	Sub-Regional Water Resources Development Project
Sudan (MultiDonor Trust Funds)	Decentralized Health System Development Project/Southern Sudan Umbrella Program for Health System Development
Tanzania	Health Sector Development II Project
Zambia	Free-Standing Operation*

* “Free-standing” should not be used interchangeably with “vertical program.” A “vertical program” implies a focus that is almost exclusive on a specific disease without simultaneous support to broader health systems issues. No Booster Program project follows this model.



TANZANIA

MALARIA IN TANZANIA

Malaria is the leading cause of morbidity and mortality in Tanzania, with over 58,000 deaths annually. More than 90 percent of the population in Tanzania lives in areas 'at risk' of malaria transmission. Groups most at risk of contracting malaria are pregnant women and children under age 5, with approximately 46,400 children a year dying from malaria. Malaria has been estimated to consume 3.4 percent of GDP or US\$240 million per year, contributing to a cycle of poverty among the poor.

SUPPORT AND STRATEGIES

Tanzania has achieved a measurable reduction of malaria mortality over the past five years and has a high-level commitment to all of the proven interventions. Securing and sustaining resources to build on this success is essential in scaling up malaria control efforts nationally. In addition to substantial support from the U.S. government (USAID) and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), totaling approximately US\$122 million, government funding and a pooled fund financed by nine development part-

ners, including the International Development Association (IDA), has supported the National Malaria Control Program, as well as district-level delivery of malaria interventions.

EXPECTED RESULTS

In 2000, the government of Tanzania embarked upon a program of reform for the health sector which has been supported by two phases under IDA's Health Sector Development Program, totaling US\$87 million through FY06/07. The government requested additional financing of US\$60 million to scale-up activities through 2010, which was approved in July of 2007.

As part of this additional funding, there is a focus on malaria, to fully implement the Ministry's Roll Back Malaria strategic plan. A "catch-up" campaign for treating bednets with long lasting insecticide, as well as expanding access to bednets more broadly, will be supported. Funding from the U.S. President's Malaria Initiative (PMI) is insufficient to achieve prevention and treatment on a national scale. In addition, previous financing from some partners has been scaled back, and a proposal to the Global Fund was recently rejected. As a result, the Bank was asked to complement existing resources with US\$25 million for malaria control interventions. PMI anticipates committing an additional US\$110 million over the next three years. Recent Global Fund requests, if approved, would provide an additional US\$176 million in earmarked external financing for malaria control.

Key indicators (most recent data)

Total population (2007)	40.5 million
Reported malaria cases (2006)	13.1 million
Number of households owning at least one ITN* (2004)	1.7 million (22.6%)
Children under age 5 sleeping under ITN (2004)	1.1 million (16%)
World Bank commitment to malaria under Booster Program	US\$25 million

*insecticide-treated net

this flexibility. Even “free-standing” operations, such as the Nigeria Booster Program project, are focusing on non-malaria-specific activities, such as the provision of cotrimoxazole for pneumonia treatment, oral rehydration therapy for children suffering from diarrhea and general supply chain management strengthening. Similarly, the Zambia Booster Program project provides support to the district “health basket” as part of the Sector-Wide Approach (SWAp).

3. Monitoring Results Against Monies Spent

Since the beginning of Phase I, baseline data has been collected in Booster Program countries and areas where projects have been implemented, including Benin, Eritrea, Malawi, Nigeria and Zambia. In addition, every Booster Program project has a comprehensive monitoring and evaluation component tailored to the national context. These components are put in place in the initial design for each project to ensure that information is available for use by national authorities to both manage the project and track progress toward national targets. We are also assisting countries develop decentralized monitoring and evaluation systems to manage their programs more effectively.

At global level, the World Bank has developed a Malaria Scorecard (see box for description) for tracking dollar investments and coverage progress for key interventions, such as the use of insecticide-treated nets (ITNs), access to anti-malarial treatment for children, intermittent preventive treatment for pregnant women and indoor residual spraying. Achieving targets on these interventions will reduce malaria-related sickness and death.

Focus on Results

While projects vary in their design, all Booster Projects are measured against the indicators and targets agreed by the Roll Back Malaria (RBM) Monitoring and Evaluation Reference Group (MERG). Specific attention is paid to enabling program managers at central and district levels to obtain data for decision making and reporting purposes. At global level, the World Bank has developed a **Malaria Scorecard** for tracking dollar investments and coverage progress for key interventions, such as the use of insecticide-treated bed nets, access to anti-malarial treatment for children, intermittent preventive treatment for pregnant women and indoor residual spraying. The Scorecard is currently being discussed with partners, many of whom are interested in defining a joint accountability framework to which partners in the malaria fight will be held accountable. The World Bank is also working with partners to augment the Scorecard with a joint tool through the development of a **Data Warehouse** that all partners and countries can use to track progress and results to facilitate program planning.

Additionally, the Booster Program has secured a partnership with the ExxonMobil Foundation to enhance monitoring and evaluation efforts. The partnership will facilitate the population of the Scorecard to provide up-to-date information on metrics such as the number of children sleeping under long-lasting insecticidal nets or the number of households that have been sprayed.

With this revised Scorecard, global financiers and endemic countries will be able to track how their resources are being spent and assess the value of the investments that are being made. Ultimately, it will be a powerful tool for all partners in the fight against malaria. The Scorecard is a reflection of the Booster Program’s commitment to measuring results in an effort to drive sustainable progress.



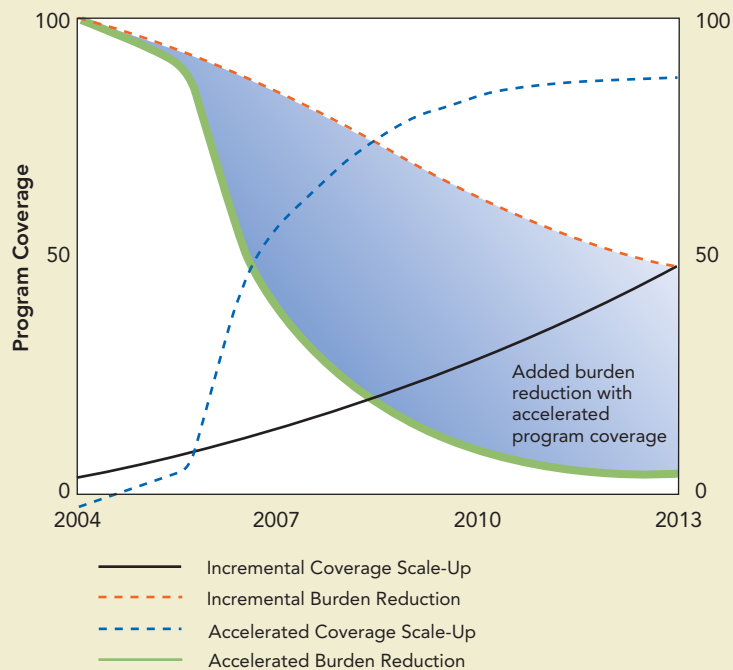
4. Spending the Money Effectively

The funding that has been allocated under the Booster Program is being spent on cost-effective and technically-sound malaria control interventions. The World Health Organization's (WHO) Global Malaria Program has certified that interventions and activities supported by the Booster Program are in line with WHO policies and technical standards.

All of the Booster Program projects are now in the implementation phase, with the exception of those in Tanzania, Ghana and Kenya, which were approved only recently. There is considerable variation in project progress across the Booster Program portfolio, with some countries taking longer to begin significant activities. In countries that have had an initial slow start, major implementation activities are about to take place. For example, in October 2007, Benin will be implementing a campaign for free distribution of 1.4 million LLINs across the country. Senegal will soon provide free LLINs through non-governmental organizations (NGOs) as part of a nutritional improvement program. In addition, Nigeria has just successfully completed one of its largest procurements of LLINs and the nets are now on their way. In the Senegal River Basin, critical monitoring and evaluation activities are taking place to provide important baseline data for the project.

The Booster Program operates through country systems and in some of the most challenging countries in sub-Saharan Africa. In this context, while some delays are to be expected,

A "Front-loaded" Approach to Scale-Up for Impact Coverage and Burden Reduction

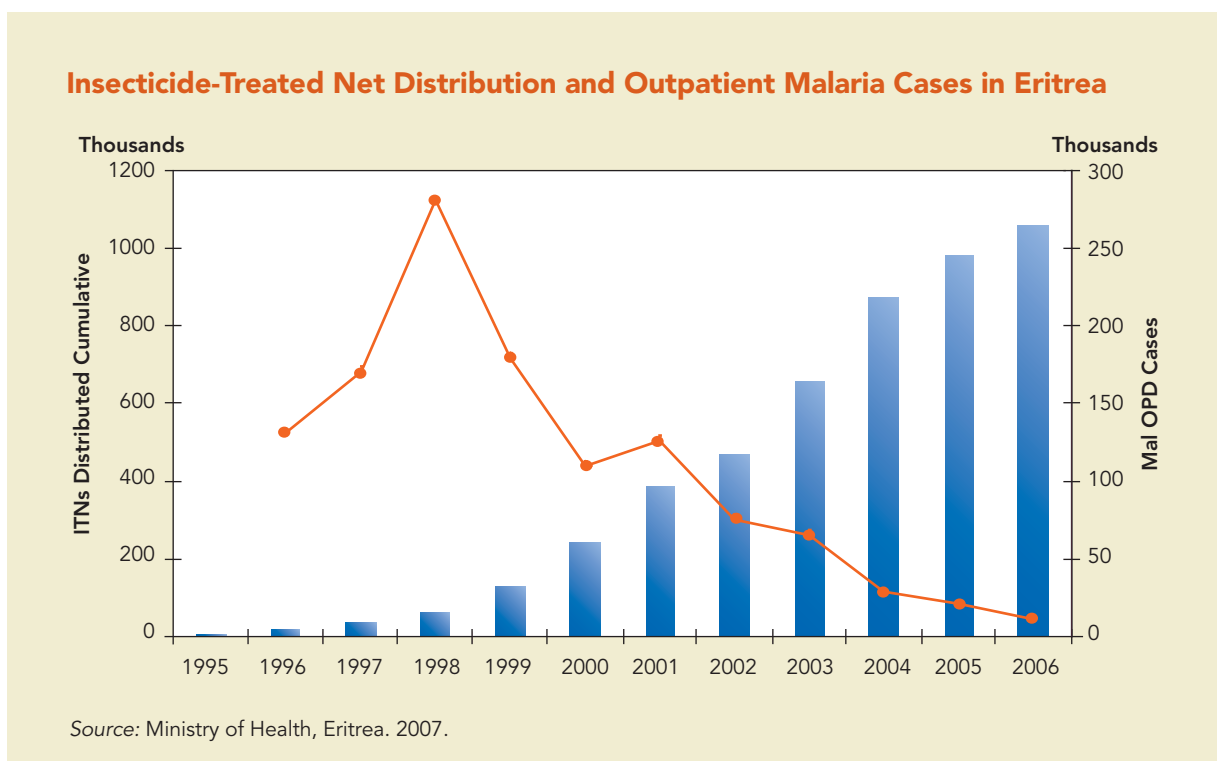


Courtesy of the Malaria Control and Evaluation Partnership in Africa (MACEPA 2006)

One of the underlying principles that has fueled the rapid demand for IDA resources has been a desire by countries to "front-load" malaria control efforts to bring the disease under control. Unlike many other public health problems, malaria cannot be satisfactorily controlled with incremental approaches, largely because its vectors are too efficient. Successful malaria control requires bold, decisive steps to obtain high coverage of key proven malaria-control interventions quickly, followed by a phase where those gains are sustained through regular public health services. This concept of a heavy up-front effort, as opposed to a more incremental approach, has been termed "Scaling-Up for Impact" or "SUFU" in the development community.

SUFU focuses on rapid national-level scale-up of a full package of malaria-control interventions to achieve high coverage to reap epidemiological benefits and quickly demonstrate improved health and economic outcomes. SUFU, defined by its scope, its speed and its outcome, has obliged the World Bank and other donors to front-load financing to bring malaria to more manageable levels as soon as possible. In recent months, partners have come together to ensure that key financing mechanisms are replenished to safeguard the progress made so far. As each country case illustrates, partnership is essential to SUFU.

Part III: Progress



countries are now receiving intensified support from the Bank's Malaria Implementation Resource Team (MIRT) and the Roll Back Malaria (RBM) Partnership for critical health systems and implementation issues. Other countries such as Ethiopia and Zambia are disbursing their IDA funds faster than expected (having committed more than 70 percent already) and have shown excellent preliminary progress. Both countries are achieving remarkable malaria control results and are on track, if

efforts are sustained, to decrease malaria as a cause of public health importance.

Eritrea's marked decline in both malaria cases and deaths has continued, with a decrease in malaria cases by 63 percent and a decrease of malaria deaths by an astonishing 85 percent since 1999. In addition, the use of ITNs by children under 5 years of age in malarious areas has risen from 4.2 percent in 2002 to 37.3 percent in 2005.



ERITREA

MALARIA IN ERITREA

Eritrea is prone to epidemic outbreaks of malaria and is one of the few sub-Saharan African countries with significant adult mortality from the disease.

SUPPORT AND STRATEGIES

In response to an especially severe epidemic and growing concern about HIV/AIDS, in 2000 Eritrea's Ministry of Health established the HAMSET Disease Control Project to control HIV/AIDS, Malaria, STDs and Tuberculosis. In June 2005, the World Bank's board approved HAMSET II, a US\$26.5 million International Development Association (IDA) grant, including US\$2 million allocated for malaria control over five years. The Ministry of Health has articulated a clear strategic plan, with a goal of "reducing malaria to such low levels that it is no longer a public health problem in the country."

With support from the World Bank, the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria, and other donors, Eritrea has employed four primary strategies against malaria:

- Targeted use of indoor residual spraying in the highest-risk areas;
- Environmental management of malaria vector breeding sites;
- Increased distribution of insecticide-treated mosquito nets; and
- Expansion of diagnostic and treatment services.

* At the World Health Assembly in May 2005, the Abuja Declaration targets set for 2005 were revised for 2010 to ensure that at least 80 percent of those at risk of, or suffering from, malaria benefit from major preventive and curative interventions by 2010 in accordance with WHO technical recommendations, so as to ensure a reduction in the burden of malaria of at least 50 percent by 2010 and 75 percent by 2015.

EXPECTED RESULTS

Despite heavy rains and large epidemics in neighboring countries, Eritrea has reduced malaria cases by an astonishing 63 percent (65,517 cases were reported in 2003 versus 179,000 malaria cases reported in 1999). The use of insecticide-treated nets (ITNs) by children under 5 years of age in malarious areas has risen from 4.2 percent in 2002 to 37.3 percent in 2005. Eritrea's successful malaria control program makes it one of few countries in Africa likely to meet both the revised Abuja bednet coverage targets and the RBM malaria burden reduction goals for 2010.* However, if these efforts are not sustained, a significant risk of resurgence will remain and even more people will be at risk of dying from the disease.

After a period of uncertainty in funding and the withdrawal of many donors from Eritrea, the most recent grant approval from the Global Fund will help the government to continue to implement critical interventions for malaria control such as replacing old and worn out bednets with new long lasting insecticidal nets and supporting the switch over to artemisinin-based combination therapies for first line treatment. The World Bank will continue to work with partners and the government to maintain and expand the progress that has been achieved.

Key indicators (most recent data)

Total population (2007)	4.8 million
Reported malaria cases (2003)	72,023
Households owning at least one ITN* (2005)	536,600 (56.9%)
Children under age 5 sleeping under ITN (2005)	290,000 (37.3%)
World Bank commitment to malaria under Booster Program	US\$2 million
Board approval date	June 2005

*insecticide-treated net

Part III: Progress

“We really need to move past the malaria control versus health systems debate. As we are seeing in Ethiopia, Rwanda and Zambia among others, aggressive and up-front control of malaria is freeing up money and time for health workers to grapple with other concerns. Working closely with the Global Fund, the Bank’s Booster Program has already played a crucial and complementary role in the fight against malaria in Africa. We must now examine how the Global Fund and World Bank can co-finance a massive push against malaria across the continent.”

—Rajat K. Gupta, Chairman of the Board
Global Fund to Fight AIDS, Tuberculosis and Malaria
and Senior Partner Worldwide
McKinsey and Company

5. Country-led Partnerships and a Coordinated Effort

In September 2006, the Booster Program organized a conference called “Striking Back at Malaria through Accelerated Country Action in sub-Saharan Africa,” in Dakar, Senegal. At this event, senior country policymakers and program managers from 15 African countries were joined by RBM partners and others in the malaria control community to discuss issues critical to sustainable control and lowering the death toll. The event resulted in what is known as the “Dakar Appeal,” in which the African countries present issued an appeal to the international community to improve malaria control coordination, align funding to existing country plans (as opposed to every donor developing separate plans), and coordinate monitoring and evaluation, thereby reducing the reporting burden imposed by various donors.

One result from the Dakar Appeal has been the development of an improved understanding of the needs required for countries to achieve the agreed targets, as well as refining country malaria control plans. The World Bank, through the RBM Harmonization Working Group,* has sought to help organize partners who can assist countries in preparing these national plans, align efforts across donors and supplement national programs with needed funding and interventions.

The development of national malaria control plans is not a new activity; however, what is

* The tenth RBM Partnership Board endorsed the concept of harmonization of partner efforts to help countries scale-up for impact by mobilizing resources to overcome bottlenecks and establish the ‘three ones’: one coordinating mechanism, one plan and one M&E system at country level. The Board endorsed the revitalization of the Harmonization Working Group (HWG)—co-chaired by the World Bank and UNICEF—to facilitate these actions. The purpose of the HWG is to develop a formal partnership mechanism to facilitate and harmonize partners’ timely support in response to countries’ identified needs and to support the establishment of the ‘three ones’ at country level.

SENEGAL

MALARIA IN SENEGAL

Senegal’s entire population—12.4 million citizens—is at risk of contracting malaria; malaria is the leading cause of death among children under age 5. The disease is responsible for up to 30 percent of outpatient visits, 20 percent of hospital admissions and a quarter of hospital deaths.

SUPPORT AND STRATEGIES

The Booster Program in Senegal is a US\$5 million addition to a US\$10 million nutrition-enhancement project. Its primary focus is the distribution of long lasting insecticidal nets (LLINs) through community groups. This project builds on previous successful distributions financed under an earlier World Bank-supported nutrition project. The Senegal River Basin Water Resources Development Project (financed with a separate Malaria Booster) also will provide bednets to those living in the river basin and finance a feasibility assessment for indoor spraying and environmental management options, which have not yet been investigated thoroughly in Senegal.

EXPECTED RESULTS

During 2007 and 2008, the nutrition enhancement project intends to purchase 500,000 LLINs to be distributed to 5,000 pregnant women and 495,000 children who live in targeted communities. These interventions, which are an integral part of the national malaria control strategy supported by partners including the Global Fund and the U.S. President’s Malaria Initiative, among others, will significantly reduce the transmission of malaria.

Key indicators (most recent data)

Total population (2007)	12.4 million
Reported malaria cases (2000)	1.1 million
Households owning at least one ITN* (2006)	503,700 (36.3%)
Children under age 5 sleeping under ITN (2006)	312,680 (16.4%)
World Bank commitment to malaria under Booster Program	US\$5 million
Board approval date	November 2006

*insecticide-treated net





ETHIOPIA

MALARIA IN ETHIOPIA

Approximately 53 million Ethiopians live in areas at risk of malaria: about 33 million people live in areas with endemic but highly seasonal transmission and 20 million in areas that are epidemic prone. This transmission profile results in malaria being a leading cause of death in Ethiopia in adults and children. According to one estimate, malaria killed more than 29,000 children in the year 2000—roughly translating to an average of nearly 80 children each day.

SUPPORT AND STRATEGIES

Under the Protection of Basic Services Project*, a Health Millennium Development Goal (MDG) Performance Facility targets three priority health issues: immunization, family planning and malaria-control. The funding for malaria control is currently US\$25 million. It is hoped that donors will add additional resources to increase geographic coverage and scale up interventions.

The Facility supports the procurement of long lasting insecticidal nets (LLINs) and malaria drugs that are distributed free-of-charge, as well as other health commodities including insecticides and spray pumps. The Facility also focuses on strengthening Ethiopia's supply chain and building capacity for other functions, especially monitoring and evaluation.

*The Protection of Basic Services Project is a US\$595 million grant that is managed by the World Bank and co-financed by the International Development Association (IDA) (\$215 million), the African Development Bank, Canada, the European Union, Germany, Ireland, the Netherlands and the U.K.

The project, through the Facility, aims to reach more than 2.2 million people with artemisinin-based combination therapies (ACTs) and provide almost 3 million LLINs by the end of 2007. It also will support the revitalization of the crucial indoor residual house program.

EXPECTED RESULTS

Ethiopia has recently re-invigorated its malaria-control efforts and is on the verge of a major accomplishment. In 2003, Ethiopia was lagging behind many countries in Africa with less than 5 percent of households owning even a single treated bednet. Today, it is close to reaching an ambitious target: every household in a malarious area will own two LLINs. An impressive 20 million nets have been distributed in the past two years despite formidable obstacles; this should cover 90 percent of households in malarious areas of Ethiopia.

This turn-around can be attributed to the exceptional leadership of the government of Ethiopia. Its commitment to bringing the disease under control, despite political difficulties in the country, indicates that progress is possible even in times of instability. Working together, donors such as the Global Fund, the World Bank, DFID and CIDA, have supported the government by providing flexible and pragmatic funding to ensure that efforts are scaled up and maintained. Health centers in many parts of Ethiopia have reported a decrease in malaria patients, freeing up health worker time to deal with other pressing concerns.

Perhaps the most important accomplishment has been the reduction of child deaths over time; DHS survey findings from 2000 to 2005 revealed a greater than 20 percent drop in deaths of children under age 5 (due to all causes). The demonstrated decrease in malaria transmission, alongside the observed decline in child mortality is encouraging even if not attributable to any single intervention or program.

The early progress in Ethiopia sends a clear message: **it is possible to make dramatic gains in controlling malaria in Africa over a relatively short period of time.**

Key indicators (most recent data)

Total population (2007)	83.1million
Reported malaria cases (2003)	565,273
Households owning at least one ITN* (2005)	537,100 (3.4%)
Children under age 5 sleeping under ITN (2005)	264,800 (2.0%)
Commitment to malaria under the Multi-donor Trust Fund	US\$25 million
Board approval date	May 2006

*insecticide-treated net



Part III: Progress

Partnership Work for Results: Overlap Between the Three Largest Malaria Control Donors in Africa

Booster Country	World Bank	Global Fund	U.S. Gov't [†]
Benin	+	+	PMI Round 3
Burkina Faso	+	+	
DR Congo	+	+	USAID
Eritrea	+	+	
Ethiopia	+	+	PMI Round 3
Ghana	+	+	PMI Round 3
Guinea	+	+	USAID
Kenya	+	+	PMI Round 3
Malawi	+	+	PMI Round 2
Mali	+	+	PMI Round 3
Mozambique	+	+	PMI Round 2
Mauritania	+	+	
Niger	+	+	
Nigeria	+	+	USAID
Senegal	+	+	PMI Round 2
Sudan	+	+	USAID
Tanzania	+	+	PMI Round 1
Zambia	+	+	PMI Round 3

[†] The U.S. President's Malaria Initiative (PMI) began in 2006 in Round 1 (R1) countries, in 2007 in Round 2 (R2) countries, and will begin in 2008 in Round 3 (R3) countries.

new is the comprehensiveness and systematic evaluation of those plans to ensure that, if implemented, they will achieve full intervention scale-up and control of malaria. The alignment of partners around those plans is even newer and is a key challenge for countries and development partners.

For example, in Mozambique, the World Bank supported a comprehensive gap analysis to identify the financial and implementation support needs for the country to achieve its stated goals. The exercise was timed to coincide with an application to the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), as well as the initial discussions around additional support from the Booster Program and the U.S. President's Malaria Initiative (PMI). Rather than each major donor developing an independent plan, all the donors aligned around the needs identified in the gap analysis. While ensuring that implementation remains aligned, the preparation of projects around country-identified gaps is a welcome step to improved responsiveness to country-identified needs.

Of the 18 countries with operational or pipeline Booster Program projects, 14 are now receiving support from the World Bank and the two other largest malaria-control donors—the Global Fund and the U.S. Government (PMI and USAID). This type of coordination highlights that working in close partnership is not only efficient, but critical for success as no single donor alone can provide all the resources needed to bring malaria under control.



THE DEMOCRATIC REPUBLIC OF CONGO (DRC)

MALARIA IN THE DRC

The child mortality rate in the Democratic Republic of Congo (DRC) is among the highest in the world, with malaria as a leading cause. One in 10 children die before they reach their first birthday, and one in five will die before age 5. Malaria is also a significant cause of mortality among older children and adults.

SUPPORT AND STRATEGIES

World Bank-supported malaria-control interventions in the DRC are being implemented through two projects.

The first, the DRC Health Sector Rehabilitation Project (HSRSP), is a US\$150 million project with a Booster component of US\$30 million over four years. The project—which covers a population of 10 million people—provides long lasting insecticidal nets (LLINs), intermittent preventive treatment (IPT) for pregnant women, and artemisinin-based combination therapies (ACTs) for first-line malaria treatment. Technical assistance and operational research is also being supported, and indoor residual spraying is being tested via pilot projects and will be scaled up if successful.

To overcome the current capacity constraints in the nation's health system, the project is channeling funding through non-governmental organizations (NGOs). NGOs are delivering a standard package of health services, including malaria interventions and building capacity, especially at the local level in governmental and religious branches of the primary health care system. An external evaluation agency monitors and evaluates the project, as well as NGO performance. The results will then be reported to the government and the best-performing NGOs will receive contract supplements of up to 10 percent for additional development activities. This incentive is expected to foster competition among NGOs and therefore improve the services they provide.

A second project, covering an additional 10 million people—the US\$180 million Emergency Urban and Social Rehabilitation Project (EUSRB)—includes a US\$13 million component for malaria control in a broad-based development project. The project finances the purchase of approximately two million LLINs for households in Kinshasa with the goal of delivering up to three bednets per household to reduce malaria-related infant and child mortality. A specialized NGO is implementing the free distribution of the LLINs throughout Kinshasa, and provincial health authorities are supervising the effort. The project also finances a communications campaign to explain how and why to use LLINs. In addition, the project also expands access to ACTs and IPTs in Kinshasa.

EXPECTED RESULTS

Over the next four years, more than five million LLINs will be purchased, most of which will be distributed to children under age 5. In addition, more than 400,000 pregnancies will be made safer from increased access to IPTs and LLINs in antenatal care; more than 6.6 million ACT treatments will be provided, mostly for children under age 5.

Key indicators (most recent data)

Total population (2007)	62.6 million
Reported malaria cases (2003)	4.4 million
Households owning at least one ITN*	N/A
Children under age 5 sleeping under ITN (2001)	70,200 (0.7 %)
Bank commitment to malaria under Booster Program	US\$30 million (HSRSP) US\$13 million (EUSRB)
Board approval date	August 2005 (HSRSP) March 2007 (EUSRB)

*insecticide-treated net

Part III: Progress

6. Working with the Private Sector and New Partners

The Private Sector. The World Bank has partnered with the **ExxonMobil** to help develop an improved system of accountability and results monitoring for malaria control in Africa. The effort began with the Bank's development of the Malaria Scorecard, which aims to track dollar inputs against concrete results, providing high-level decision makers with information they need to determine progress across Africa. Furthermore, the Bank has begun developing a partnership with **Malaria No More**, a private sector organization dedicated to ending deaths from malaria in Africa by bringing the expertise and resources of the private sector to the effort.

New Partners. As a follow up to the G8 meeting in St. Petersburg in July 2006, the **Russian Federation** recognized the enormous toll of malaria in Africa and has been working with the World Bank and WHO to design a financing and technical support package to enhance the Booster Program in selected countries.

7. Working with Foundations, Civil Society and NGOs

The World Bank has worked closely with the **Bill & Melinda Gates Foundation (BMGF)** in Zambia in the preparation of the Malaria Control and Evaluation Program in Africa (MACEPA), with the BMGF's contribution totaling US\$35 million over nine years, alongside the Booster Program's commitment of US\$20 million over four years. Thanks to the strong leadership from the Zambian Ministry of Health and, in part, to the collaboration between the Bank, MACEPA and other partners, joint annual malaria program reviews with all partners have now been initiated. These reviews examine progress against agreed targets and areas for improvement, as well as identify areas where financial reprogramming is needed to meet changing needs.

The World Bank has continued its work with MACEPA to help define its proposed expansion in Africa. In addition, the Bank will benefit from the guidance of the BMGF in helping to define Phase II (2008 to 2015) of the Booster Program, and discussing future World Bank-BMGF collaboration in this regard.

The World Bank sees NGOs and civil society as crucial partners in the fight against malaria in Africa. In this regard, the Booster Program leaders have had the opportunity to meet with NGO partners from the **CORE Group** and Johns Hopkins **VOICES Project**. The World Bank is currently working with them to enhance their roles in program implementation, community outreach and grassroots accountability.



SENEGAL RIVER BASIN WATER RESOURCES DEVELOPMENT PROJECT

MALARIA IN THE SENEGAL RIVER BASIN

As recognized by the Senegal River Basin Authority*, dam construction and expanded areas for irrigation increase the prevalence of certain water-related diseases, such as malaria, by increasing mosquito larval habitats and lengthening the transmission season. Water resources development activities to foster growth and community livelihoods will be met by more malaria outbreaks unless adequate control measures are simultaneously put in place to control the disease.

SUPPORT AND STRATEGIES

In early 2005, preparation began on a US\$70 million multi-country Senegal River Basin Water Resources Development project for Senegal, Mali, Mauritania and Guinea. This project focused on modernizing the river basin institutions; fostering economic growth through water-sector development while improving the social and environmental conditions in the Basin; expanding local-level multi-purpose water resources development, such as small hydraulic infrastructure and related activities; mitigating the health impacts from the development activities; and improving regional multi-purpose and multi-sectoral water resources planning.

In October 2005, upon learning of the launch of the Booster Program, the Senegalese President and River Basin Authority Director, His Excellency Abdoulaye Wade, requested an additional US\$40 million from the World Bank to bring malaria under control in the Basin; in response the Bank prepared a Booster Program project at an accelerated pace. Priority activities were identified by each of the four countries, as well as by health-sector experts from the WHO, African Development Bank, the Global Fund and USAID. Further collaboration brought together environmental engineers, vector control experts and health specialists for the project. The project showcases the World Bank's unique capacity to help coordinate a multi-sectoral, sub-regional response. As a result an innovative approach has been developed to mitigate the potential negative impact of irrigation projects on malaria transmission, employing a regional authority to coordinate cross-border malaria control.

EXPECTED RESULTS

Through the engagement of partners, the Senegal River Basin Authority, in collaboration with the national malaria control and schistosomiasis control programs from each of the four countries, will implement malaria control measures including basin-wide mass distribution of long lasting insecticidal nets (LLINs) with the goal of increasing household ownership of insecticide-treated nets up to at least 80 percent; mass (or targeted) distribution of treatment for schistosomiasis and other soil-transmitted helminthes in affected communities to counter the increased risks associated with water-related agricultural activities; mobilization of communities through information, education, communication and behavior change activities in support of periodic mass treatment activities and year-round prevention measures to increase the percentage of children under age 5 sleeping under LLINs to more than 60 percent; and support for disease surveillance and operational research activities, followed by remedial or preventative measures if needed.

The implementation of malaria control activities in the Senegal River Basin is being coordinated closely with complementary investments through country-specific support from the Global Fund and the U.S. President's Malaria Initiative.

Key indicators (most recent data)

Total population (2007)	5.1 million
Reported malaria cases	Not available
Households owning at least one ITN*	Not yet available for the Basin area ¹
Children under age 5 sleeping under ITN	Not yet available for the Basin area
World Bank commitment to malaria under Booster Program	US\$42.6 million
Board approval date	June 2006

*insecticide-treated net

¹ A cross-border baseline survey is being conducted to provide estimates for these indicators Basin-wide.

*Organisation pour la mise en valeur du fleuve Sénégal, known as OMVS



Part IV: Challenges and Solutions

While the World Bank is pleased with the early progress made in the Booster Program and the progress being made in the fight against malaria by all partners more broadly, there have been important challenges over the past 24 months that merit further attention and discussion as we continue with the implementation of Phase I and look ahead to Phase II of the Booster Program (2008-2015).

Commodity procurement delays: It has not been unusual for countries to wait for months to receive long lasting insecticidal nets (LLINs) and malaria treatments. These delays are due to both weak supply chain management, as well as bureaucratic delays at both the country level and sometimes within the World Bank. As a result, LLINs have sometimes arrived after the rains, the time when transmission can be at its highest and during which the population at-risk should already be using their nets. Similarly, drug “stock-outs” remain a problem across many Booster countries. In response, the Bank is focusing on capacity building, training and technical assistance, to help countries with procurement and supply-chain management through multi-country workshops and in-country support.

Within the World Bank, having learned from past mistakes, the procurement procedures for crucial malaria commodities have now been streamlined through a centralized review and clearance system in the Bank’s Africa Region. Since the Booster Program put in place this system for all essential malaria control commodities, World Bank response times have dropped from one or two weeks to less than 48 hours in most cases. Approximately US\$65.5 million of LLINs, artemisinin-based combination therapies (ACTs) and insecticide procurements were cleared between January and May 2007. In June 2007, the Bank organized a procurement workshop for professionals working in the health sector in Anglo-

“As one of the largest foreign direct investors on the African continent, ExxonMobil has witnessed first-hand the devastating impact of malaria and other infectious diseases. Stopping the scourge of malaria is critical not only for the well-being of our employees, families and communities, but also for the social and economic development of the region. Several years ago, ExxonMobil began applying our core business capabilities to harness the power of partnerships to save lives in Africa. Recently, ExxonMobil committed to assist the World Bank and its malaria community partners to tackle a key foundation of long-term effective malaria control—the monitoring and evaluation of programs. With this vital data on disease trends from M&E programs, countries can assess their progress, and donors will no longer be “flying blind” on the impact of their investments.”

—Dr. Steven Phillips
ExxonMobil Medical Director
Global Issues and Projects

Part IV: Challenges and Solutions



phone Booster Program countries in Africa. A similar capacity-building effort will take place in December 2007 for the Francophone group of countries. MIRT is also putting in place an early warning system to ensure close monitoring of the portfolio to prevent delays. Additionally, the World Bank is working with the U.S. President's Malaria Initiative (PMI) and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) to create monitoring and evaluation plans that include logistics management information systems to accurately track commodities and allow for more effective mobilization. Such a system could track resources from the time they enter a port to the time they are delivered to their ultimate destination.

Achieving harmonization for impact: The coordination and harmonization required among partners is highly labor intensive, especially since activities are not implemented by the health sector alone. These efforts can add time to planning and implementation processes, but are essential for

countries to achieve their targets. Significant progress has been made and partners are working together more frequently and efficiently, but still more must be done. One solution has been the Roll Back Malaria (RBM) Harmonization Working Group, which the World Bank co-chairs with UNICEF. This group (including WHO, the Global Fund, the U.S. Government, the Malaria Control and Evaluation Partnership in Africa Project, Malaria No More, Bill & Melinda Gates Foundation and others) works to coordinate partner inputs, assess and fill gaps and support country-driven plans. It is putting in place an early warning system to alert the malaria community to problems, as well as a team to help countries overcome bottlenecks in “real-time.” Work has begun in Mozambique and Zambia and will soon be underway in other parts of sub-Saharan Africa. The Working Group has also supported countries to improve the quality of their malaria funding proposals to the Global Fund (see box on next page), as well as assist countries to comprehensively as-

Harmonizing Support for Global Fund Round 7

Since 2002, approximately US\$1.7 billion has been granted for malaria control in sub-Saharan Africa by the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund). However, in the last round of submission approvals for the Round 6 funding cycle, less than 30 percent of submitted proposals for malaria control in sub-Saharan Africa were considered worthy of financing by the Technical Review Panel, an independent group of experts assembled to assess the proposals. Success rates in Africa were considerably lower. The failure to secure reliable funding for those countries with the highest disease burden continues to hinder country efforts to scale up malaria control.

In 2006, the Global Fund challenged the Roll Back Malaria Partnership (RBM) Board to collectively mobilize goal-oriented, highly-focused technical assistance for malaria-endemic countries in order to increase the acceptance rate of malaria grant proposals. In response, the RBM launched a strategic campaign to ensure the quality of Round 7 proposals was significantly improved. The RBM Harmonization Working Group, which is co-chaired by the World Bank and UNICEF, systematically identified 19 priority countries to receive a package of comprehensive assistance. Training workshops were held in Kenya and Cameroon to assist applicant countries with proposal preparation and consultants, both national and international, were mobilized, along with intensive support from RBM partner organizations. As part of this process, more than 120 participants from these 19 countries took part in “mock” review panels and further consultations with leading public health experts prior to the submission deadline.

This was the global malaria community’s first coordinated push to assist countries to develop quality proposals in an unprecedented, country-led effort to

secure malaria control funding across the African continent. Countries and their partners aim to have at least 60 percent of these proposals approved. The effort highlights the emphasis that the Bank places on leveraging the resources of partners with IDA funding, which is in-line with the catalytic role of IDA outlined in the Booster Program Strategy. The Bank’s leadership role in this process, in strong partnership with WHO, UNICEF, Malaria Control and Evaluation Partnership in Africa (MACEPA) and other partners, has assisted in the presentation of the largest and most technically-sound funding package for malaria ever submitted to the Global Fund at about US\$2.2 million dollars. Initial feedback from countries and partners has been overwhelmingly positive, and the results from the efforts will be announced in November 2007.

Malaria control in Africa is at a critical juncture. Progress is being made and technologies to control the disease exist. But if resources are not available to build on the current successes and sustain the momentum to fight malaria, African countries run the risk of losing even more people to this preventable and treatable disease.





GHANA

MALARIA IN GHANA

Malaria is the major public health problem in Ghana. Approximately 3 million cases attributed to malaria are registered in health facilities annually, and it accounts for about 40 percent of all outpatient department cases and about 13 percent of all recorded deaths. There has been, however, considerable progress recently largely supported by the Global Fund to fight AIDS, Tuberculosis and Malaria. It has been reported that in 20 selected Global Fund districts, the malaria case fatality rate for children under age 5 dropped from 3.3 percent in 2003 to 2.3 percent in 2005. Nationwide, the percentage of children under 5 sleeping under an insecticide-treated net (ITN) has increased from 4 percent in 2003 to 22 percent in 2006.

MALARIA CONTROL: STATUS AND NEED

Currently, the major sources of funding and technical support for the malaria-control program in Ghana are the Global Fund, UNICEF, U.S. President's Malaria Initiative (PMI), Japan, WHO, and the Government of Ghana (GOG) supported in part by the SWAp¹ (salaries and infrastructure). It must be noted, that for key commodities such as ITNs and particularly artemisinin-based combination therapies (ACTs), the program relies exclusively on external financing. There has been no budgetary allocation for commodities for the program by the

GOG to date; however, warehousing and salaries of staff are completely covered by the government. This is a major concern as the continuous availability of ACTs must be guaranteed to expand effective control and to not jeopardize the current achievements.

WORLD BANK SUPPORT

The Booster Program is a US\$10 million component embedded in a US\$25 million Nutrition and Malaria Control for Child Survival Project. The goal of the malaria control component is to increase utilization of long lasting insecticidal nets (LLINs) in order to reduce malaria related illness and deaths among children under five and pregnant women. The project supports the free distribution of LLINs to pregnant women through antenatal care services and children through campaigns, various community outreach programs, and Child Welfare Clinics. The project also supports activities that help improve the correct utilization of LLINs. Finally, it aims to strengthen the monitoring and evaluation (M&E) capacity of the National Malaria Control Program (NMCP) including capacity to conduct insecticide resistance monitoring and key operational research.

EXPECTED RESULTS

By 2011, 80 percent of household in project areas will have at least two LLINs and this coverage level is expected to be sufficient to extend protection from malaria infection beyond the individuals sleeping under nets to the entire community. The NMCP will establish baseline data and undertake regular surveys to monitor availability and utilization of bednets. Information, Education and Communication and Behavior Change Communication (IEC/BCC) activities associated with the distribution of nets will be funded by the NMCP from other existing sources.

Key indicators (most recent data)

Total population (2007)	23.5 million
Reported Malaria cases (2003)	3.6 million
Number of households owning at least one ITN* (2006)	1.1 million (18.7%)
Children under age 5 sleeping under ITN (2006)	694,700 (21.8%)
World Bank Commitment to Malaria under Booster Program	US\$10 million

*insecticide-treated net

¹ The World Bank contribution to this SWAp is US\$90 million which has already disbursed ahead of schedule.



sess their needs and develop actions plans to coordinate partners and substantially increase resources.

In addition, the World Bank is playing an important role in the RBM Monitoring and Evaluation Reference Group (MERG) by helping to coordinate monitoring and evaluation planning, as well as aligning the plans of major donor partners to reduce the reporting burden on countries.

Insufficient capacity at the country level: Even as scale-up efforts are underway, capacity for project implementation continues to be a major challenge. Resources that are allocated for commodities need

to be coupled with resources for addressing other systems constraints. In this context, the Booster Program is working with partners to build country capacity in areas such as procurement and supply chain management, monitoring and evaluation, and planning and budgeting to help ensure effective use of available resources.

Insufficient data: Obtaining minimal information for program management and reporting is still a priority need in many countries. Revising and adjusting data collection tools, as well as actually collecting data, is a time-intensive process. Further, mid-project analyses may require changes in

Part IV: Challenges and Solutions



existing or planned programs. The Booster Program, as part of the RBM MERG, is working to refine existing tools, develop new ones and assist countries in obtaining data for program management at central and district levels as well as generate and disseminate information to the international malaria control community. In addition, working closely with PMI and the Global Fund as part of the RBM MERG and the Harmonization Working Group (HWG), the Bank is supporting the development of fully costed and comprehensive monitoring and evaluation plans, beginning in 12 sub-Saharan African countries. The Booster

Program is also working closely with key partners to strengthen logistics management information systems in countries.

Health system constraints: Health system constraints such as health worker shortages and limited supply chain capacity in many African countries are enormous and, once identified, they are not easily or quickly rectified. This underscores the urgent need to drastically slash the burden of malaria, which will relieve the pressure on the health system and free resources that can be used to target other major constraints. Through its



COUNTRY PROFILE

NIGER

MALARIA IN NIGER

Niger suffers from one of the world's highest child mortality rates: more than a quarter of all children die before reaching age 5. Malaria is a leading contributor to these deaths, with 97 percent of the population living in malaria-endemic areas and the rest living in epidemic-prone areas.

SUPPORT AND STRATEGIES

The World Bank-supported Booster Program is a US\$10 million component of the Niger Institutional Strengthening and Health Sector Support Project (ISHSSP), approved in early 2006. The project promotes preventative and therapeutic interventions and the malaria component is firmly embedded in the National Malaria Control Program. The Booster Program financing complements the funding provided for malaria control by other major sources, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria; UNICEF; WHO; Canada and Japan.

A top priority for the project in Niger is increasing access to and use of effective interventions. The country is working to scale-up the use of artemisinin-based combination therapies (ACTs), improve net use through community education campaigns and address the opportunities for programmatic links between malaria and other issues, such as reproductive health and immunization.

EXPECTED RESULTS

Approximately 250,000 long lasting insecticidal nets (LLINs) will be distributed in Niger with World Bank support over the next two years, protecting over 500,000 people. Approximately 750,000 treatments of ACTs are expected to be distributed—mainly to children under 5 years of age—through the Booster Program. In addition, the project will provide broader health sector support to improve resource allocation and prioritization, address human resource issues and target other maternal and child health priorities.

Key indicators (most recent data)

Total population (2007)	14.2 million
Reported malaria cases (2002)	681,707
Households owning at least one ITN* (2006)	968,300 (43.0%)
Children under age 5 sleeping under ITN (2006)	202,500 (7.4%)
World Bank commitment to malaria under Booster Program	US\$10 million
Board approval date	January 2006

*insecticide-treated net

Part IV: Challenges and Solutions

The Dakar Appeal

In September 2006, the World Bank's Africa Region hosted a regional event in Dakar, Senegal, called "Striking Back at Malaria through Accelerating Country Action in Sub-Saharan Africa." The event brought together international organizations, bilateral agencies, policymakers and representatives from the private sector, NGOs and malaria programs throughout Africa, to discuss ways to advance the fight against malaria. A forum was created where the country voice—that is, the people working on the ground, from country program staff to NGOs—was made audible through a "Dakar Appeal." This call challenged partners and countries to meet the Abuja Targets by 2010.

Key elements of the Dakar Appeal are:

- Monitoring and evaluation: The need to have one national monitoring system supported and accepted by all donors, as opposed to the current system where countries report different data for different donors' needs;
- Procurement: The need to develop a centralized procurement option for crucial malaria control commodities given country-level difficulties;
- Transparency and accountability: The need for mutual accountability using a common system for tracking around spending and results;
- Improved planning and filling of financial gaps: The need to develop such mechanisms for those countries that are clearly well-performing; and
- Rolling out ACTs: The difficulties in rolling out ACTs and guidance on how to prioritize treatment deployment in the face of constraints.

two-pronged approach, the Booster Program is aiming to bring malaria under control while supporting more general health systems development activities, such as improving procurement and forecasting capacity and strengthening monitoring and evaluation.

Initial difficulties introducing Artemisinin-based Combination Therapies (ACTs): If parasite resistance builds to the latest drugs (ACTs), then our window of opportunity will close and millions of lives will be lost as we wait for other treatments to be introduced. At the same time, a number of challenges hinder the introduction of ACTs. These include a lack of viable long-term financing methods for countries that have extreme needs and limited funds, plus related procurement and distribution issues. The Booster Program team in Africa is supporting the efforts led by the World Bank Human Development Network around the creation of an Affordable Medicines Facility for Malaria (AMFm) and is helping to conceptualize various implementation realities at the country level for implementing such a subsidy (see box on page 59).

A funding gap is likely preventing full Scale-Up for Impact: The estimated annual funding needed to control malaria in Africa has recently been estimated at as much as US\$2.2 billion per year.¹ The U.S. government, Global Fund and the World Bank are the three largest malaria control donors to Africa and collaborate closely as part the Roll Back Malaria Partnership. These three donors have approximately US\$2.5-2.8 billion in total commitments between them to be spent over the next 4-5 years for malaria control in Africa, or about US\$500 million/year. This leaves a critical gap in financing of approximately US\$1.7 billion per year over the next five years to bring malaria under control in sub-Saharan Africa. The Booster Program is working with partners, and encouraging emerging donors, to ensure that resources are available to accelerate and sustain progress.



COUNTRY PROFILE

KENYA

MALARIA IN KENYA

Malaria is a leading cause of death in children under 5 in Kenya. Approximately, 29 million people (78 percent) of Kenya's population live in areas of risk for malaria transmission. Transmission occurs throughout the year along the border with Uganda near Lake Victoria. Elsewhere, seasonal transmission occurs, with duration varying greatly from locality to locality and some areas experiencing two transmission seasons. Malaria impacts economic growth and productivity, and it has been estimated that nearly 170 million working days are lost annually due to malaria.

SUPPORT AND STRATEGIES

The government of Kenya has already made dramatic gains in the fight against malaria; more than 13.4 million insecticide-treated nets have been distributed in the last five years. Childhood deaths have been reduced by 44 percent in high-risk districts, in-patient malaria cases and deaths are falling and there are reduced cases at the community level. In addition, the government has distributed 12 million doses of artemisinin-based combination therapy (ACT) and sprayed 824,600 houses in epidemic-prone districts. The nets, which are financed as part of a US\$82 million grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), were provided jointly with a range of other essential health interventions, including measles vaccinations, polio vaccinations (in select districts), vitamin A, and de-worming medicine. Although significant resources have been made available by the Global Fund, procurement and implementation difficulties have slowed progress. The U.K. Department for International Development

(DFID)-funded project that involves contracting out to Population Services International (an NGO that works in malaria endemic provinces in Kenya) is making gains in increasing insecticide-treated net use.

With the recently approved World Bank Total War Against HIV/AIDS Project for US\$80 million plus an additional US\$33 million in joint funding (to be administered by the World Bank) from DFID, the World Bank team is working with the government to take into account the opportunities that exist in-country to control other diseases such as malaria while complementing partners efforts to fight HIV/AIDS.

EXPECTED RESULTS

As part of the project, US\$4 million dollars worth of bednets will be procured for free distribution to people living with HIV/AIDS that are in malaria transmission zones. The Booster Program is also looking into other opportunities for boosting malaria control activities in the country.

Key indicators (most recent data)

Total population (2007)	37.5 million
Reported malaria cases (2002)	124,197
Number of households owning at least one ITN* (2003)	443,100 (5.9%)
Number of children under age 5 sleeping under ITN (2003)	258,200 (4.6%)
World Bank commitment to malaria under Booster Program	US\$4 million

*insecticide-treated net



SUDAN

MALARIA IN SUDAN

Malaria is a leading cause of morbidity and mortality in Sudan. All of Southern Sudan and parts of Northern Sudan experience year-round transmission. While the risk of malaria epidemics decreases as you move north, parts of Northern Sudan are still vulnerable to these epidemics. There are an estimated 7.5 million cases resulting in 35,000 deaths per year. Malaria accounts for about one-fifth of outpatient cases, nearly one-third of inpatient cases and one-fifth of all hospital deaths.

The response to malaria has been hindered by conflict, poverty and climatic factors leading to proliferation of mosquito breeding sites, poor infrastructure and poor education. As a result, much of the population has little or no information and limited access to the prevention and management of malaria. Over the last few years, the following measures were taken:

- A national 10-year strategic plan was developed;
- A plan was developed for scaling up the use of insecticide-treated nets (ITNs);
- A national policy for control of malaria in pregnancy was initiated; and
- The national drug policy was updated to use ACTs for first-line treatment.

The infrastructure of the national program continues to be strengthened.

Key indicators (most recent data)

Total population (2007)	38.6 million
Reported malaria cases (2003)	3,084,320
Percentage of households owning at least one ITN* (2005)	North 21%
Children under age 5 sleeping under ITN (2005)	North 15.4% South 1.9%
Commitment to malaria under the Multi-donor Trust Fund	US\$16.5 million (South) US\$1.2 million (North)

*insecticide-treated net

SUPPORT AND STRATEGIES

Over the last 5 years, the Global Fund has granted more than US\$27 million in two separate Phase I grants for Northern and Southern Sudan, and close to US\$23 million has been disbursed to date. The overall goal of the proposal is to reduce the malaria burden to the extent that it is no longer a public health problem, focusing on a three-pronged strategy:

- Control of malaria through improving case management with prompt diagnosis and effective treatment;
- Distribution and promotion of appropriate use of ITNs, especially among pregnant women and children under 5 years of age and;
- Epidemic forecast and control.

WORLD BANK RESPONSE

Due to its arrears situation, Sudan is not eligible for International Development Association (IDA) funding, but the World Bank administers two Multi-Donor Trust Funds (North and South) created after the North-South peace agreement of 2005. Projects co-financed by these Sudan Multi-Donor Trust Funds (MDTFs) and the government include malaria-control interventions.

Southern Sudan—The MDTF is financing 1 million long lasting insecticidal nets (LLINs) to be distributed over the next year. Additional support is expected in order to reach the target of two nets per household by 2009. The MDTF also supports pharmaceuticals and capacity building for malaria and maternal and child health.

Northern Sudan—The MDTF is financing 190,000 LLINs and government is financing 230,000 LLINs that will be distributed in conflict-affected rural areas.

Making Malaria Treatment More Affordable and Accessible

There is a dual challenge in the treatment of malaria. First, the new drugs: the artemisinin-based combination treatments (ACTs) are 10-40 times as expensive as the older drugs, which are increasingly ineffective. Second, since ACTs are the only first-line antimalarial drugs still appropriate for widespread use against the most lethal forms of malaria, malaria's toll could rise if resistance to artemisinin was allowed to spread. The poor cannot afford the combination treatment and inappropriate use of single treatments would lead to drug resistance, rendering the ACTs useless. In 2004, Professor Kenneth Arrow and colleagues published a report recommending a global buyer subsidy of ACTs as the most economically and biomedically sound means to meet the dual challenge; the proposed buyer subsidy would work through the public and private sectors. In addition to saving lives, the proposed innovation would delay the onset of resistance to ACTs—creating a global public good. Improved access to these drugs is part of a package of interventions that includes prevention. Analyses spon-



sored by the World Bank confirmed the principles laid out by Arrow and others. With financing from the Bill & Melinda Gates Foundation for the preparation phase, the Bank, Roll Back Malaria partner institutions and many others are working to design the architecture and management arrangements for a facility (AMFm) to provide and oversee the subsidy.



Part V: Looking Ahead

Concluding Phase I

As the Booster Program moves into the concluding year of its first phase, World Bank Task Team Leaders and the Malaria Implementation Resource Team (MIRT) plan to maintain their momentum on projects already under way and focus additional energies on:

- Addressing major bottlenecks to implementation with focus on procurement and supply-chain management and monitoring and evaluation.
- Strengthening the quality of the Booster Program portfolio. The World Bank is committed to assisting Booster Program countries receiving International Development Association (IDA) funding in making effective use of resources.
- Expanding the Booster Program's partnership base, including expansion with non-health sectors within the World Bank such as Urban, Infrastructure, and Education.
- Mobilizing additional IDA resources since we are still about US\$50 million short of the US\$500 million target to be fulfilled by the end of Phase I (i.e., June 2008).

Going Forward to Phase II

As we enter the final year of Phase I of the Booster Program, there are some important lessons that are beginning to emerge, prompting key questions to be addressed as we move forward:

- Constraints in IDA envelopes as well as other partner resources have led to the design of programs that are substantially limited in size and scope in several countries. This has resulted in a “sprinkling effect” at country level. Indeed, in most countries, despite already significant resources mobilized by all partners, national coverage has yet to become a reality. How

many countries are really on course to achieve Scaling-Up for Impact (SUF) for national coverage with this current approach?

- Partnership work has been critical to success and the Booster Program should remain fully committed to strengthening existing partnerships and bringing on new partners in the fight against malaria in Africa. How can we coordinate with partners more effectively to support a continental scale up?
- We have exploited the Bank's comparative advantages in innovative financing, cross-sectoral projects and regional support (like the Senegal River Basin Project) but we have not exploited them enough, particularly given the cross border and cross sector issues to be addressed in order to have a major impact at the continental level. The Booster Program is light-years ahead of where we were 24 months ago, but, in addition to country support, could we take better advantage of regional approaches?
- A major impetus is still needed on monitoring and evaluation: (a) full high-level consensus around high-level results tracking has yet to be achieved; and (b) despite efforts, significant attention to M&E at country level is still required. How can we better work together to improve the way in which we approach M&E both globally and at country level?
- Strengthening capacity at country level is essential to accompany a major scale up effort, and the Booster Program is placing substantial emphasis on this aspect. What are the additional mechanisms/resources we need to put in place for countries to better position themselves in the fight against malaria, both during this scale-up and also to sustain the gains?

These initial questions will be further discussed as we embark on the design of the second phase of the Booster Program. While modest compared to

Part V: Looking Ahead

“To truly bring malaria under control, we must begin to treat Africa as an island. We’ve made remarkable progress in some countries over the past few years, but many are being left behind. Malaria does not respect borders, and it’s time we find a way to eliminate malaria as a public health threat across Africa, building on the good work that individual countries are doing. We need to take the nets and drugs to continental scale, and quickly, to break the back of transmission in Africa and free up scarce resources in the health system to tackle other pressing concerns.”

—Tedros Adhanom Ghebreyesus
Honorable Minister of Health of Ethiopia
and Chair of the RBM Board Partnership

what is needed, the current US\$450 million of commitments under the Booster Program for Malaria Control in Africa is making a difference.

The question facing the Bank, our partners, and countries is: are we satisfied with the current progress that is being made through incremental, country-by-country gains? Should we capitalize on the unique opportunity and momentum that currently exists globally to bring malaria under control and consider, in addition, a bolder and perhaps regional move?

Early progress in Eritrea, Zambia, Rwanda, and Ethiopia in bringing malaria under control is confirming the global RBM Partnership hypothesis offered at the start of the Booster Program and the RBM Partnership more broadly: Malaria control is possible in the sub-Saharan African context.

Such progress also offers the proof of concept for “front loading” resources to bring malaria under control, which we are discussing with our partners. While the up-front investment needed to apply this approach at the continental level would necessitate more substantial resources in the short term* as well as more robust implementation support, the cost-savings resulting from slashing a persistently high malaria burden are likely to exceed and justify the initial investments.

As we did for Phase I of the Booster Program, and given the need for joint and complementary efforts to achieve the Abuja Targets, the Bank will reach out to countries and partners to develop the design of Phase II of the Program. As we recognize the progress made and challenges faced in Phase I of our Booster Program, we invite you to help us learn from our experiences and to design a second phase that will meet the demands of our client countries so that future generations can live in an Africa free from malaria.

* From IDA, the Global Fund, U.S. President’s Malaria Initiative, the Bill & Melinda Gates Foundation, Malaria No More, other current and emerging partners, and the private sector.

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Bonnie Gillespie, Voices for a Malaria-Free Future	11
Bonnie Gillespie, Voices for a Malaria-Free Future	12
World Bank	14
Meg Hallahan, Sumitomo Chemical	17
Bonnie Gillespie, Voices for a Malaria-Free	19
World Bank	20
Bonnie Gillespie, Voices for a Malaria-Free Future	21
Bonnie Gillespie, Voices for a Malaria-Free Future	22
World Bank	23
Bonnie Gillespie, Voices for a Malaria-Free Future	26
Arne Hoel, World Bank	27
Palle Peter Skov, Vestergaard Frandsen	29
World Bank	32
Arne Hoel, World Bank	34
Bonnie Gillespie, Voices for a Malaria-Free Future	36
World Bank	39
Bakari Emmanuel Daou	41
World Bank	42
Bonnie Gillespie, Voices for a Malaria-Free Future	43
Bonnie Gillespie, Voices for a Malaria-Free Future	45
World Bank	47
Meg Hallahan, Sumitomo Chemical	48
Bonnie Gillespie, Voices for a Malaria-Free Future	50
Bonnie Gillespie, Voices for a Malaria-Free Future	51
World Bank	52
World Bank	53
Meg Hallahan, Sumitomo Chemical	54
Bonnie Gillespie, Voices for a Malaria-Free Future	55
World Bank	57
Bonnie Gillespie, Voices for a Malaria-Free Future	58
Bonnie Gillespie, Voices for a Malaria-Free Future	59
Meg Hallahan, Sumitomo Chemical	60



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