



## OFFICE OF INSPECTOR GENERAL

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# AUDIT OF USAID/TANZANIA'S ONGOING ACTIVITIES UNDER THE PRESIDENT'S MALARIA INITIATIVE

AUDIT REPORT NO. 4-621-11-007-P  
APRIL 29, 2011

PRETORIA, SOUTH AFRICA



*Office of Inspector General*

April 29, 2011

**MEMORANDUM**

**TO:** USAID/Tanzania Mission Director, Robert F. Cunnane

**FROM:** Regional Inspector General/Pretoria, Christine M. Byrne /s/

**SUBJECT:** Audit of USAID/Tanzania's Ongoing Activities Under the President's Malaria Initiative (Report No. 4-621-11-007-P)

This memorandum transmits our final report on the subject audit. We have considered management's comments on the draft report and have incorporated them into the final report as appropriate. Management comments have been included in their entirety in Appendix II.

The report includes two recommendations to strengthen the mission's activities under the President's Malaria Initiative. On the basis of management's comments on the draft report, we consider that management decisions have been reached on both recommendations, with final action taken on Recommendation 2. Recommendation 2 is thereby closed upon issuance of this report. Please provide the Office of Audit Performance and Compliance Division (M/CFO/APC) with the necessary documentation to achieve final action on Recommendation 1.

I want to express my sincere appreciation for the cooperation and courtesy extended to my staff during the audit.

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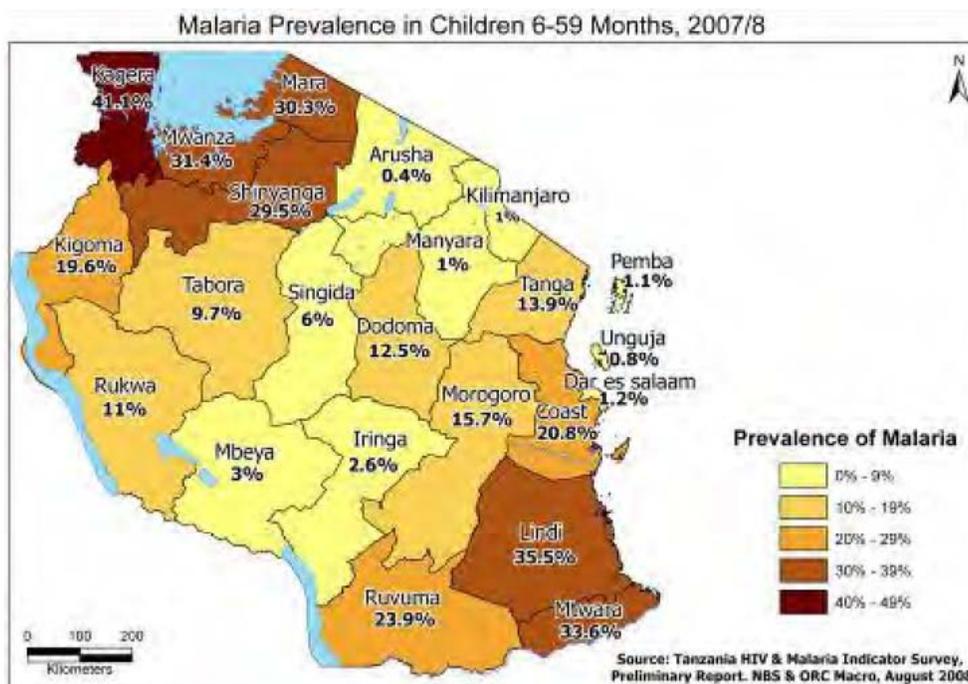
## Abbreviations

The following abbreviations appear in this report:

ACT	artemisinin-based combination therapy
IPTp	intermittent preventive treatment for pregnant women
IRS	indoor residual spraying
JSI	John Snow, Inc.
MEDA	Mennonite Economic Development Associates
PMI	President's Malaria Initiative
RTI	Research Triangle Institute
SP	sulfadoxine-pyrimethamine

# SUMMARY OF RESULTS

Although malaria is a preventable and treatable disease, it is estimated to cause between 300 million and 500 million illnesses annually and kill up to 2 million people each year. More than 90 percent of these illnesses and deaths occur in sub-Saharan Africa. In most of sub-Saharan Africa, children under 5 and pregnant women are the most vulnerable to infection since they have little or reduced immunity.<sup>1</sup> In the United Republic of Tanzania, 93 percent of the 40.7 million people on the mainland and all 1.2 million people on Zanzibar are at risk for malaria.<sup>2</sup> As shown in the map below<sup>3</sup>, the rate of prevalence of malaria among Tanzanian children under 5 exceeded 30 percent in some areas.



The President’s Malaria Initiative (PMI) began in 2005 as a 5-year, \$1.2 billion U.S. Government effort to reduce the burden of malaria in 15 African countries. PMI is a U.S. Government interagency effort spearheaded by USAID and implemented with the Centers for Disease Control and Prevention. In June 2005, the U.S. Government selected the United Republic of Tanzania (including the mainland and Zanzibar) as one of the first three countries to be included in PMI. The Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008<sup>4</sup> expanded the effort by authorizing \$5 billion for fiscal years 2009–2013 to fight malaria.

The goal of PMI is to reduce malaria-related mortality by 50 percent after 3 years of implementation in each country. This goal is to be achieved by reaching 85 percent of the most

<sup>1</sup> President’s Malaria Initiative: Technical Guidance on the Prevention and Control of Malaria. January 10, 2009.

<sup>2</sup> Tanzania Country Profile, President’s Malaria Initiative. April 2010.

<sup>3</sup> Zanzibar is an archipelago made up of Unguja and Pemba, as shown in the map.

<sup>4</sup> Public Law 110-293, Section 303(b).

vulnerable groups—children under 5 and pregnant women—with proven preventive and therapeutic interventions, including insecticide-treated mosquito nets (bed nets), indoor residual spraying (IRS), intermittent preventive treatment for pregnant women (IPTp), and artemisinin-based combination therapy (ACT).

USAID/Tanzania obligated \$48.9 million and disbursed \$16.5 million for PMI activities to 16 implementing partners from October 1, 2009, through September 30, 2010. The mission's two largest partners were Research Triangle Institute (RTI) and Mennonite Economic Development Associates (MEDA), which received about \$27 million and \$11 million of the fiscal year 2010 obligations, respectively. RTI is responsible for USAID/Tanzania's IRS activities; MEDA is responsible for USAID/Tanzania's activities related to distributing bed nets. In addition, John Snow, Inc. (JSI) was allocated \$9.7 million by USAID/Washington to coordinate ACT procurements for Tanzania.

The mission's Malaria Operational Plan for 2010 established the following goals for the end of 2010:

- At least 85 percent of houses in geographic areas targeted for IRS will have been sprayed.
- More than 90 percent of households with a pregnant woman or children under 5 will own at least one bed net.
- At least 85 percent of children under 5 will have slept under a bed net the previous night.
- At least 85 percent of pregnant women will have slept under a bed net the previous night.
- At least 85 percent of pregnant women and children under 5 will have slept under a bed net the previous night or in a house that has been sprayed with IRS in the last 6 months.
- At least 85 percent of women who have completed a pregnancy in the last 2 years will have received two or more doses of IPTp during that pregnancy.
- At least 85 percent of children under 5 with suspected malaria will have received treatment with ACTs within 24 hours of the onset of symptoms.
- At least 85 percent of government health facilities will have ACTs available for treatment of uncomplicated malaria.

The Regional Inspector General/Pretoria conducted this audit to answer the following questions:

- Are USAID/Tanzania's mainland activities under the President's Malaria Initiative achieving their main goal of reducing malaria-related deaths by 50 percent by reaching 85 percent of the most vulnerable segments of the population with prevention and treatment interventions?
- Has USAID/Tanzania's earlier success<sup>5</sup> in reducing malaria-related mortality on Zanzibar been sustained?

In answer to the first question, USAID/Tanzania's ongoing activities under PMI on the mainland have contributed to reaching the most vulnerable segments of the population with prevention and treatment interventions; however, USAID/Tanzania's interventions were not achieving their

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<sup>5</sup> The program's success on Zanzibar was noted in a May 14, 2007, Inspector General report, "Audit of USAID/Tanzania's Implementation of the President's Malaria Initiative" (4-621-07-005-P).

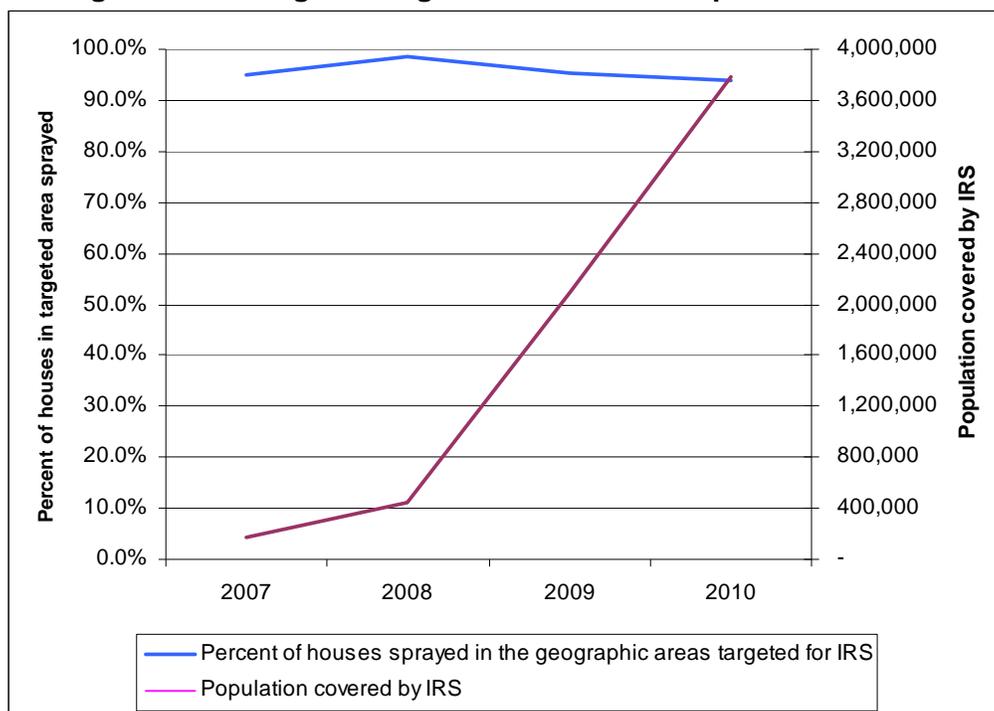
goal of reaching 85 percent of the target population. In answer to the second question, USAID/Tanzania’s earlier successes appear to have been sustained.

## Mainland Activities

USAID/Tanzania had reached the established target for only one type of intervention, IRS, as of November 1, 2010. Additionally, the mission did not sufficiently track one indicator—the percentage of government health facilities that have ACTs available for the treatment of uncomplicated malaria. The results related to the seven outcome indicators that were tracked are described below. Although USAID/Tanzania could not show that it had reached the targets for seven of the eight indicators, the mortality rate for children under 5 has decreased by almost 28 percent since USAID began malaria interventions under PMI in Tanzania.<sup>6</sup> Because many factors affect the mortality rate for children under 5, monitoring and evaluation experts, including representatives from USAID and the Centers for Disease Control and Prevention, were conducting an impact assessment to determine the proportion of this reduction attributable to reductions in malaria-specific mortality.

**Indoor Residual Spraying.** The goal for indoor residual spraying was to have at least 85 percent of houses in targeted areas sprayed by the end of 2010.

**Figure 1. Coverage of Targeted Houses and Population With IRS**



Both the population covered and the area targeted for indoor residual spraying have increased since 2007, and coverage rates have stayed above the goal of 85 percent (Figure 1 and

<sup>6</sup> This decrease in the mortality rate for children under 5 was for all of Tanzania, but because the mainland represents 97 percent of the population of Tanzania, the decrease applies to child mortality on the mainland.

Table 1). In addition, the implementing partner responsible for IRS was scheduled to start spraying more districts in January 2011.

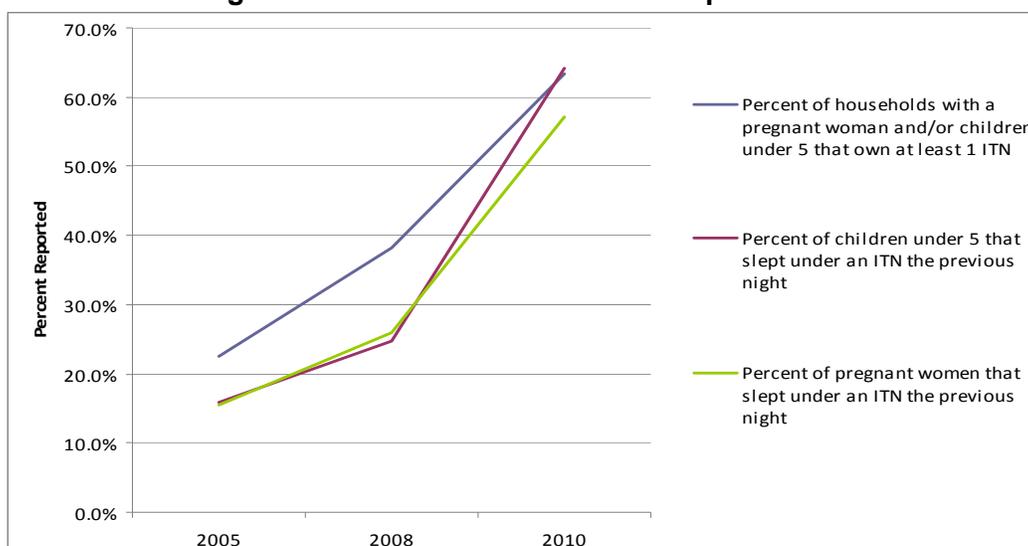
**Table 1. Coverage of Targeted Houses With IRS**

	2007	2008	2009	2010	Target
Percent of houses sprayed in the geographic areas targeted for IRS	94.9	98.6	95.2	93.8	85.0
Population covered by IRS	167,871	448,690	2,086,929	3,791,236	NA

Source for Figure 1 and Table 1: RTI (Note: The audit team audited the process RTI used to prepare this information from the source documents, but was not able to review the preparation of the source documents because RTI was not spraying any houses during the audit site visits.)

**Bed Net Ownership and Use.** The end-of-2010 goals for insecticide-treated net ownership and use were to have more than 90 percent of households with a pregnant woman or children under 5 owning at least one bed net, and to have 85 percent of these two vulnerable populations sleeping under a bed net or in a house that has been sprayed in the last 6 months.<sup>7</sup>

**Figure 2. Rates of Bed Net Ownership and Use**



Although none of these indicators reached the targets established by PMI, net ownership and use increased significantly from 2005 to 2010 (Figure 2 and Table 2). To further increase net ownership and use, the mission—with the Global Fund to Fight AIDS, Tuberculosis and Malaria and the Government of Tanzania—initiated two mass distribution campaigns. The first targeted children under 5 and distributed about 8.8 million long-lasting insecticide-treated nets from October 2008 to May 2010; the second targeted the rest of the population with 18.9 million nets and was ongoing as of September 2010, with distribution to be completed in May 2011. The Global Fund to Fight AIDS, Tuberculosis and Malaria financed most of these campaigns, contributing over \$100 million for the second campaign.

<sup>7</sup> The mission had not yet calculated the percentage of pregnant women and children under 5 that had either slept under a bed net the previous night or in a house sprayed with IRS in the last 6 months. However, the information available showed this goal had not been reached as of the beginning of 2010.

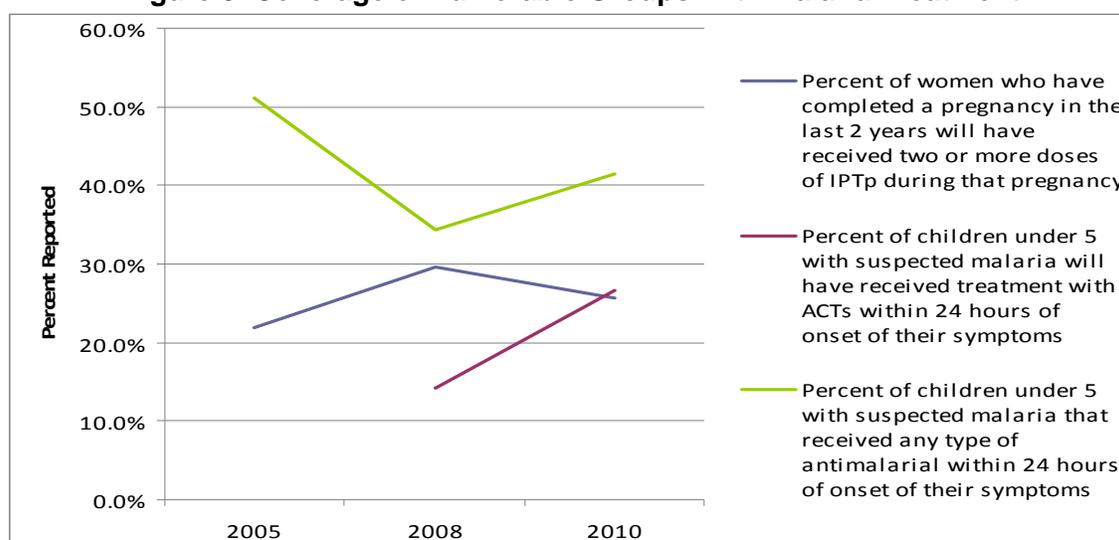
**Table 2. Rates of Bed Net Ownership and Use**

Result	2005	2008	2010	Target
Percent of households with a pregnant woman or children under 5 that own at least one bed net	22.5	38.3	63.4	90
Percent of children under 5 that slept under a bed net the previous night	15.9	24.8	64.1	85
Percent of pregnant women that slept under a bed net the previous night	15.4	26.0	57.1	85

Source for Figure 2 and Table 2: Tanzania National Bureau of Statistics (unaudited)

**Intermittent Preventive Treatment for Pregnant Women and Treatment of Children Under 5 With Suspected Malaria Within 24 hours of the Onset of Symptoms.** The goals for this area were that by the end of 2010 at least 85 percent of women who had completed a pregnancy in the preceding 2 years would have received two or more doses of IPTp during that pregnancy, and that at least 85 percent of children under 5 with suspected malaria would have received treatment with ACTs within 24 hours of the onset of symptoms.

**Figure 3. Coverage of Vulnerable Groups With Malaria Treatment**



Although the percentage of pregnant women receiving IPTp increased between 2005 and 2008, it decreased between 2008 and 2010. USAID and implementing partner officials agreed that the decrease was largely caused by stock outages of the drug provided to pregnant women (sulfadoxine-pyrimethamine or SP). For example:

- In July 2007, when the Ministry of Health and Social Welfare (the Ministry) changed the first-line treatment for uncomplicated malaria to ACTs, they did not inform the Medical Stores Department<sup>8</sup> (the Department) that SP would still be needed for IPTp.

<sup>8</sup> The Medical Stores Department is part of the Ministry of Health and Social Welfare, but operates like a government-owned enterprise.

- In early 2008, the Government of Tanzania provided SP to health facilities for free, but the Ministry and the Department could not agree on which agency should bear the costs for distributing the SP. According to the minutes provided by USAID/Tanzania of a meeting between donors and officials from the Government of Tanzania in August 2010, Department officials noted that the Ministry still owed them 96 million Tanzanian shillings (about \$64,000) for this distribution.
- USAID/Tanzania officials noted that they have considered purchasing SP, but because the drug is produced locally and the U.S. Government cannot purchase locally manufactured SP, they decided against importing SP.

Mission officials noted that these political obstacles were a primary reason for stock outages, although these obstacles had been resolved as of December 2010. Mission and implementing partner officials noted they were formulating new strategies to increase the percentage of pregnant women receiving IPTp. Still, the audit found the target unrealistic (page 9).

The percentage of children under 5 with suspected malaria who received ACTs within 24 hours of the onset of symptoms has been measured only twice, in 2008 and 2010 (Table 3).

**Table 3. Coverage of Vulnerable Groups With Malaria Treatment**

	2005	2008	2010	Target
Percent of women who have completed a pregnancy in the last 2 years will have received two or more doses of IPTp during that pregnancy	21.9	29.6	25.7	85
Percent of children under 5 with suspected malaria will have received treatment with ACTs within 24 hours of the onset of symptoms	NA	14.2	26.7	85
Percent of children under 5 with suspected malaria that received antimalarials within 24 hours of the onset of symptoms	51.1	34.4	41.5	85

Source for Figure 3 and Table 3: Tanzania National Bureau of Statistics (unaudited)

Mission officials noted that no measurement was made in 2005 because the Government of Tanzania did not introduce ACTs as the first-line treatment for malaria until 2007. Although the percentage nearly doubled from 2008 to 2010, the percentage of children with suspected malaria who received *any type of antimalarial* within 24 hours of the onset of symptoms *decreased* between 2005 and 2010. In other words, a higher percentage of children with suspected malaria received treatment in 2005 than in 2010. Additionally, the percentage reported for 2010 (26.7 percent) is still almost 60 percent below the target, indicating that the target is unrealistic (page 9).

Several factors may explain the lack of progress. One is that USAID/Tanzania has not had a program to promote the rapid and accurate treatment of children with malaria-related symptoms, although at the time of our audit the mission was receiving applications for a new program to promote the treatment of febrile illnesses in children. Another factor is the limited availability of ACTs: almost 15 percent of children treated for suspected malaria received an antimalarial other than an ACTs. However, the latter factor is difficult to quantify because USAID does not have a reliable means to track the availability of ACTs at health facilities in Tanzania (page 10).

## Zanzibar Activities

In Zanzibar, it appears that the significant decrease in malaria prevalence described in a May 2007 Office of Inspector General report has been sustained. As shown in the map on page 1, malaria prevalence in children under 5 on the Zanzibari islands of Unguja and Pemba was 0.8 percent and 1.1 percent, respectively, in August 2008.<sup>9</sup> Additionally, a report prepared by the Zanzibar Malaria Control Programme indicated that, of those people with malaria symptoms that were tested between January and June 2010, only 1.8 percent of them tested positive for malaria.<sup>10</sup> Therefore, one can conclude that the percentage of the total population with malaria would be much lower.

However, while the goal of reaching 85 percent coverage of the most vulnerable segments of the population has been reached for IRS, other key interventions—bed nets and intermittent preventive treatment for pregnant women—are lagging and showing signs of stagnation. Between the 2007/2008 Tanzania HIV/AIDS and Malaria Indicator Survey and the 2009/2010 Demographic and Health Survey, bed net ownership improved from 72 to 76 percent, but bed net use among children and pregnant women fell by 4 and 1 percentage points, respectively. Mission officials noted that this recent reduction in bed net use may be a result of the population's perceived reduction in the risk of contracting malaria in Zanzibar.

The earlier decrease in malaria prevalence is being more systematically monitored through PMI support of a mobile-phone-based malaria surveillance system that collects weekly malaria data from 69 health facilities in Zanzibar. Finally, the 2007/2008 Tanzania HIV/AIDS and Malaria Indicator Survey reported that since PMI activities started in Zanzibar, all-cause mortality rate for children under 5 has declined by 22 percent. The proportion of this decline attributable to reductions in malaria-specific mortality is being investigated.

USAID/Tanzania was considering a number of issues necessary to build upon earlier successes, such as how to keep bed net ownership and usage rates up, when and how to scale down and terminate IRS programs in Zanzibar, whether a mass screening and treatment campaign should be used to decrease malaria prevalence even further, and whether Zanzibar can fund and sustain the malaria interventions in the near future.

The audit findings relate to mainland activities:

- Targets for two key interventions were not sufficient to track progress (page 9).
- Mission did not sufficiently track the availability of ACTs at health facilities (page 10).

Detailed findings appear in the following section.

To address these findings, we make two recommendations:

1. Develop realistic targets to track progress toward achieving overall President's Malaria Initiative goals (page 9).
2. Develop and implement a reliable, cost-effective means of determining the availability of ACTs at health facilities in Tanzania (page 11).

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<sup>9</sup> As recently as 2005, the prevalence rate of the malaria parasite was 25–30 percent in the population tested.

<sup>10</sup> These data were unaudited.

The audit's scope and methodology are described in Appendix I, and the mission's comments are included in Appendix II. Our evaluation of the mission's comments is on page 12.



**ACTs delivered to the central warehouse in Dar es Salaam come in packages bearing the logos of the two U.S. Government agencies involved in implementing PMI: USAID and the Centers for Disease Control and Prevention. (Photos by Regional Inspector General/Pretoria, November 16, 2010)**

# AUDIT FINDINGS

## Targets for Two Key Interventions Were Not Sufficient to Track Progress

Performance targets are critical elements of USAID's results-oriented management philosophy. Targets orient stakeholders to the tasks to be accomplished and motivate individuals involved in a program to do their best to ensure the targets are met. Once a program is under way, targets serve as the guideposts for judging whether progress is being made on schedule and at the levels originally envisioned. Reflecting the importance of targets, the USAID Automated Directives System 203.3.4.5 states that missions should "set performance targets that are ambitious, but can realistically be achieved within the stated timeframe and with the available resources."

Despite this guidance, two key malaria interventions had targets that were not realistic. The 2010 Malaria Operational Plan established the following goals to be achieved by the end of 2010 for these two interventions: (1) at least 85 percent of women who have completed a pregnancy in the last 2 years will have received two or more doses of IPTp during that pregnancy and (2) at least 85 percent of children under 5 with suspected malaria will have received treatment with ACTs within 24 hours of the onset of symptoms. However, according to the Tanzania Demographic and Health Survey for 2010, these indicators were 26 and 27 percent for IPTp and ACT treatment for children under 5, respectively. Mission officials noted that the targets were unrealistic given the local operating environment.

The President's Malaria Initiative has a single set of country-level targets for the four major control measures, including the above interventions. The targets are the same for each focus country. Mission officials believed that they did not have any control over the targets, which were set by the PMI Coordinator's office in Washington, D.C. However, the mission could set intermediate targets to measure incremental progress in achieving the ultimate country-level goals established by PMI. By using only the ultimate targets, which were not feasible in the short term, USAID/Tanzania deprived itself of the motivational benefits that properly set targets can provide. More importantly, these unrealistic targets were not useful in managing for results. Consequently, this audit makes the following recommendation.

***Recommendation 1.*** We recommend that USAID/Tanzania develop realistic targets to track its progress toward achieving the overall goals of the President's Malaria Initiative.

## **Mission Did Not Sufficiently Track the Availability of Artemisinin-based Combination Therapy at Health Facilities**

Automated Directives System 203.3.2.1 notes that one of the principal steps in performance management is "collecting and analyzing performance information to track progress toward planned results," and adds that mission officials "should regularly collect, analyze, and interpret the data in order to enhance [the mission's] ability to make program/project adjustments in a timely manner."

Despite these requirements, USAID/Tanzania did not have a system in place to provide reliable information about the availability of ACTs for the treatment of uncomplicated malaria at government health facilities, one of the key indicators contained in the 2010 Malaria Operational Plan. The only recent information the mission relied on came from end user surveys prepared by JSI. These surveys used a sample that was neither random nor large enough to project to the population. To conduct these surveys, JSI visited 20 different clinics each quarter and reported to USAID on the availability of health commodities at each. Therefore, although the survey for the quarter ended September 30, 2010, showed that 37 percent of service delivery points did not have any ACTs in stock, and 84 percent of service delivery points were missing at least one formulation<sup>11</sup> of ACTs, the mission could not use this information to report on the availability of ACTs countrywide.

Dependable information was not available because USAID/Tanzania's Office of Health and Population relied on the surveys prepared by JSI, although the information was not reliable. USAID/Tanzania had addressed the lack of reliability in the performance management plan by calling for a service provider assessment to be completed every 2–3 years to determine, using a nationally representative sample, the availability of health commodities at clinics in Tanzania. Mission officials noted that a service provider assessment was not completed because the Government of Tanzania did not want one. As of January 2011, Government of Tanzania officials were still working on a nationwide logistics management system, rolled out in December 2009, which they believe is the only way to better gauge ACT stock at the facility level. Mission officials did not rely on the system because of late and incomplete reporting by facilities. Given the limitations on the information available, the use of statistical sampling may be a useful source of additional information. With reasonable assumptions of the expected error and precision, as well as a 90 percent confidence interval, it would be possible to project the availability for all 4,500 clinics by reviewing a random sample of 50 clinics.

Without an up-to-date service provider assessment or another reliable assessment of the availability of ACTs, mission officials and other stakeholders were unsure whether ACTs were widely available on the mainland and what effect limited availability might have on the treatment of malaria. Reliable information about the availability of ACTs would help USAID and other donors decide how to increase the percentage of children with suspected malaria that are treated with ACTs.

Reliable information could also serve as an inventory control. An August 21, 2010, article in the *Wall Street Journal* noted that perhaps tens of thousands of donated antimalarials were stolen from Tanzania's central stores. The article states: "What we know for sure is that donated

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<sup>11</sup> A formulation is a type of dose for a specific age range. In order to treat all age ranges, a clinic should have four formulations of ACTs.

products, which are supposed to be given free to clinics, are not reaching patients and are being stolen and diverted.” Although the audit did not verify the accusations made in the article, the lack of reliable data on antimalarial stocks at clinics could allow the theft of drugs to go undetected. To emphasize the need for reliable information, we make the following recommendation.

***Recommendation 2.*** *We recommend that USAID/Tanzania develop and implement a reliable, cost-effective means of determining the availability of artemisinin-based combination therapy at health facilities in Tanzania.*

# EVALUATION OF MANAGEMENT COMMENTS

In its comments on the draft report, USAID/Tanzania agreed with both recommendations, and management decisions have been reached on both. In addition, final action has been taken on Recommendation 2. Our detailed evaluation of management's comments follows.

For Recommendation 1, the mission agreed to meet with PMI officials and develop realistic annual targets during the fiscal year 2012 consultative meeting process, which is scheduled for May 2011. New annual targets will be part of the fiscal year 2012 Malaria Operational Plan, which is expected to be approved in December 2011. Based on management comments, a management decision has been reached on Recommendation 1.

For Recommendation 2, the mission agreed to develop and implement a reliable, cost-effective means of determining the availability of ACTs at health facilities in Tanzania. The mission noted that it had consulted with the Government of Tanzania and JSI and developed a plan to increase the sample size to 640 randomly selected health facilities per year, with each facility being visited twice a year. The survey using the new methodology will commence in May 2011. Accordingly, a management decision has been reached and final action taken on Recommendation 2.

# SCOPE AND METHODOLOGY

## Scope

The Regional Inspector General/Pretoria conducted this performance audit in accordance with generally accepted government auditing standards.<sup>12</sup> Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions in accordance with our audit objective. We believe that the evidence obtained provides that reasonable basis. The purpose of this audit was to determine (1) whether USAID/Tanzania's ongoing activities under PMI are achieving their main goal of reducing malaria-related deaths by 50 percent by reaching 85 percent of the most vulnerable segments of the population with prevention and treatment interventions and (2) whether successes on Zanzibar previously reported by the USAID Office of Inspector General have been sustained.

The scope of the audit covered results for activities conducted from fiscal year 2006 to fiscal year 2010. The Regional Inspector General/Pretoria performed this audit at USAID/Tanzania, the offices of implementing partners in Dar es Salaam and Mwanza, the office of the National Malaria Control Program, the Medical Stores Department offices and central warehouse in Dar es Salaam, the Medical Stores Department zonal warehouse in Mwanza, the regional medical officer's office in Mwanza, and two health facilities in the Mwanza Region. The audit was conducted from November 1 through November 19, 2010. The Mwanza Region was visited during the audit because it has the largest zonal warehouse in Tanzania and because it is one of three regions on the mainland where indoor residual spraying operations take place.

In planning and performing the audit, the audit team assessed management controls related to USAID/Tanzania's organizational structure, the agreement process, program planning, data quality management, reporting procedures, ongoing monitoring, and program evaluations.

Between October 1, 2004, and September 30, 2010, \$165.2 million was budgeted for PMI activities in Tanzania. USAID/Tanzania obligated \$48.9 million and disbursed \$16.5 million for PMI activities between October 1, 2009, and September 30, 2010. We reviewed the two largest partners funded by USAID/Tanzania, RTI and MEDA, which received about \$27 million and \$11 million of the fiscal year 2010 obligations, respectively. RTI was responsible for USAID/Tanzania's IRS activities. MEDA was responsible for USAID/Tanzania's activities related to bed nets. In addition, we reviewed the activities of JSI to coordinate the ACT procurement for Tanzania. JSI was allocated \$9.7 million by USAID/Washington that was not included in the \$48.9 million obligated by USAID/Tanzania noted above.

## Methodology

To answer the audit objectives, we reviewed the key planning and reporting documents for USAID/Tanzania, as well as reports from implementing partners and the Government of Tanzania to identify the key goals of PMI in Tanzania and the achievements reported by USAID/Tanzania and its partners.

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<sup>12</sup> *Government Auditing Standards*, July 2007 Revision (GAO-07-731G).

These documents included:

- The performance management plan dated April 2009
- The fiscal year 2009 performance plan and report
- The fiscal year 2010 Malaria Operational Plan
- The 2004-05 Tanzania Demographic and Health Survey
- The 2007/2008 Tanzania HIV/AIDS and Malaria Indicator Survey
- The 2010 Preliminary Results from the Tanzania Demographic and Health Survey
- Quarterly end-user verification surveys from October 2008 to September 2010
- The Fiscal Year 2010 checklist and certification required under the Federal Managers' Financial Integrity Act of 1982.<sup>13</sup>

Using these documents, we identified key outcome indicators identified in the Malaria Operational Plan as the highest level indicators available for review. The highest level indicator results were mostly from the Tanzania Demographic and Health Surveys and the Tanzania HIV/AIDS and Malaria Indicator Survey. These surveys were reviewed by the audit team to ensure that the results were sufficient and reliable. Specifically, the sample size was large enough to be reasonably precise and the survey was prepared by the Tanzania Bureau of Statistics, which was independent of USAID/Tanzania's malaria activities.

To determine USAID/Tanzania's progress toward achieving these goals, we met with officials from USAID/Tanzania, the Government of Tanzania, MEDA, RTI, and JSI. We reviewed the records maintained by RTI for IRS in the Mwanza Region, which enabled us to verify the accuracy of the outcome indicators that came directly from RTI.

In addition, we identified the commodity supply chain as a key area for the success of the program. To identify any weaknesses in this area, we reviewed the procedures used to procure, store, and distribute commodities, specifically ACTs, in Tanzania. Additionally, we reviewed the invoices for procurements received at the airport, the receiving note prepared when a shipment arrives at the central warehouse, the transfer-out documents prepared by the Medical Stores Department central warehouse, and the transfer-in documents prepared in Mwanza for shipments to the Mwanza warehouse.

We reconciled the differences between the information in the inventory management system used by the Medical Stores Department and the documentation collected for procurements and the summary schedule prepared by JSI. We also reviewed the documentation supporting the information in the inventory management system and found no exceptions.

We utilized the Government Accountability Office's *Standards for Internal Control in the Federal Government* and USAID's Automated Directives System, Chapters 200 through 203.

We established two materiality thresholds to determine success. If the coverage of malaria interventions had increased since the program began, but did not reach 85 percent, the stated goal, we stated that the program had made progress, but had not achieved the goal. If the program had achieved 85 percent coverage, we stated that the program had succeeded.

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<sup>13</sup> As codified in 31 U.S.C. 3512.

# MANAGEMENT COMMENTS



## MEMORANDUM

**DATE:** April 6, 2011

**REPLY TO**  
**ATTN OF:** Robert Cunnane, Mission Director /s/

**SUBJECT:** Mission Comments on “Audit of USAID/Tanzania’s Ongoing Activities Under the President’s Malaria Initiative” (Report No. 4-461-11-XXX-P)

**TO:** Christine Byrne, Regional Inspector General/Pretoria

**REF:** AUDIT REPORT No. 4-621-11-XXX-P, dated March 7, 2011

This memorandum transmits the Mission’s comments on the subject audit of the President’s Malaria Initiative (PMI) in Tanzania. The Mission will address the two recommendations, and has already taken steps to close Recommendation 2. However, The Mission takes issue with the finality of the heading for Audit Finding #2, which implies that USAID/Tanzania did not do any facility-based ACT tracking at all. JSI DELIVER had been carrying out end-use verification surveys in 20 facilities per quarter before and at the time of this audit. The Mission clearly appreciates the challenges of tracking ACTs at health facilities, and would agree that the availability of ACTs at health facilities was not *sufficiently* tracked at the time of this audit.

### Plan for Corrective Actions with Target Completion Dates

**Recommendation 1:** *We recommend that USAID/Tanzania develop realistic targets to track its progress toward achieving the overall goals of the President’s Malaria Initiative.*

**Mission Response:** Mission concurs. The PMI/Tanzania team will consult with PMI Headquarters to develop realistic annual targets for all outcome indicators, including “*Percent of women who have completed a pregnancy in the last two years who have received two or more doses of IPTp during that pregnancy,*” and “*Percent of children under 5 with suspected malaria who have received treatment with ACTs within 24 hours of the onset of symptoms*” during the FY 2012 consultative meeting process, which is scheduled for May 2011. New annual targets will be part of the FY 2012 Malaria Operational Plan, which is expected to be approved in December 2011. These indicators will be tracked annually through the MoHSW’s “sentinel panel of districts” system, which currently captures health facility and community data from 27 districts, representing a national sample.

The to-be-approved FY 2012 Malaria Operational Plan will be forwarded to the Regional Inspector General/Pretoria to close this recommendation.

***Recommendation 2: We recommend that USAID/Tanzania develop and implement a reliable, cost-effective means of determining the availability of artemisinin-based combination therapy at health facilities in Tanzania.***

**Mission Response:** Mission concurs. In August 2010, the Mission began to address this issue in conjunction with NMCP, MSD, and JSI by discussing the methodology of end-use verification surveys to provide sufficient information on ACT availability at the health facility level. In January 2011, plans with JSI were finalized to increase the sample size to 640 randomly-selected health facilities per annum, with each facility being visited twice per year. This will represent 13% of Mainland health facilities, providing a more representative snapshot and enabling trend analyses to be conducted. The survey using the new methodology will commence in May 2011.

The first report reflecting the use of this new methodology will be sent to the Regional Inspector General/Pretoria in August 2011 to close this recommendation.

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