USAID | DELIVER PROJECT

FROM THE AMERICAN PEOPLE

IQC SEMI-ANNUAL REPORT

OCTOBER 2008 THROUGH MARCH 2009

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CONTENTS

Acronyms v
IQC Semi-Annual Report 1
IQC Vision 1
IQC Implementation 2
IQC Indicators 4
Implementation of the New Business Model 11
Innovate and Use Best Practices in Supply Chain Management 11
Promote Data-based Decision Making for the Entire Supply Chain 13
Partner with Local Organizations including the Private Sector 14
Utilizing Local Hires in Project Implementation 16
Using Subcontractor Capacities 17
"Lead from Family Planning" 18
The "Go to Place" for Public Health Supply Chain Improvement 19
Individual Task Order Achievements 20
Appendix A. MIS Performance Metrics Report 31

Figures

1. Task Order 1 Commodity Distribution 24
2. Task Order 2 Commodity Distribution 26
3. Task Order 3 Commodity Distribution 29

Tables

1. Summary of Project Task Order Implementation 3
2. In-Country Technical Assistance Support from October 2008 through March 2009 5
3. Specific Indicators for Scorecard by Task Order 9
4. On-time Shipments 9

ACRONYMS

3-D Kit	Depopulation, Decontamination, and Disposal (Kit)
ACT	artemisinin-based combination therapy
AI	avian influenza (also called bird flu)
AIDS	acquired immune deficiency syndrome
AIIS	Avian Influenza International Stockpile
ARV	antiretroviral (drug)
CAR	Countries-at-Risk
CCB	Change Control Board
COTR	Contracting Officer's Technical Representative
CPT	Contraceptive Procurement Table
CS	contraceptive security
CSCMP	Council of Supply Chain Management Professionals
CSL	Commodities Security and Logistics Division (USAID)
CSOG	Commodity Support Optimization Group
DFID	Department for International Development (UK)
DHO	District Health Office
DTTU	Delivery Team Topping Up
EDLS	Essential Drugs Logistics System
EMMA	End-Use Malaria Monitoring Activity
ESAMI	Eastern and Southern Management Institute
FAO	Food and Agriculture Organization
FHI	Family Health International
FP	family planning
FPLM	Family Planning Logistics Management (project)
FP/RH	family planning/reproductive health
FY	fiscal year
GFATM	Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria
GH	global health
H5N1	influenza A virus subtype (also called bird flu)

HIDN	Office of Health, Infectious Diseases and Nutrition (USAID)
HIV	human immunodeficiency virus
IAPHL	International Association of Public Health Logisticians
ILRI	International Livestock Research Institute
IQC	indefinite quantity contract
IUD	intrauterine device
JSI	John Snow, Inc.
KOMNAS	National Committee for Avian Influenza Control and Pandemic Influenza Preparedness (Indonesia)
LMIS	logistics management information system
LN	long-lasting insecticide-treated bed net
MAP	Multicountry AIDS Program (World Bank)
MDG	Millennium Development Goal
MIS	management information system
MIT	Massachusetts Institute of Technology
MOH	Ministry of Health
MSH	Management Sciences for Health
MSH/SPS	Management Sciences for Health/Strengthening Pharmaceutical Services
NGO	nongovernmental organization
NMCP	National Malaria Control Program
OAA	Office of Acquisition and Assistance
PMI	President's Malaria Initiative
PPE	personal protective equipment (avian influenza)
PPMR	Procurement Planning and Monitoring Report
PPMRm	Procurement Planning and Monitoring Report (malaria)
PRH	Office of Population and Reproductive Health (USAID)
PRISMA	*Proyectos en Informática Salud Medicina y Agricultura* (Peru)
QA	quality assurance
RDC	regional distribution center
RDMA	Regional Development Mission for Asia (USAID)
RDT	rapid diagnostic test (used for malaria and others)
RH	reproductive health
RHSC	Reproductive Health Supplies Coalition

SBS	Surveillance Biosecurity Kit (avian influenza)
SCMS	Supply Chain Management System project
SDP	service delivery point
SOP	standard operating procedure
SP	sulphadoxine-pyrimethamine
STTA	short-term technical assistance
TA	technical assistance
TB	tuberculosis
TO	task order
UN	United Nations
UNEPI	Uganda Expanded Programme on Immunization
UNFPA	United Nations Population Fund (formerly United Nations Fund for Population Activities)
USAID	U.S. Agency for International Development
WHO	World Health Organization
WPRO	Regional Office for the Western Pacific (WHO)

IQC SEMI-ANNUAL REPORT

IQC VISION

The goal of the USAID | DELIVER PROJECT is to increase the availability of essential health supplies for public and private services and programs, and to seek a more equitable world by improving the health of underserved communities in the developing world. The purpose of the Indefinite Quantity Contract (IQC) is to design, develop, strengthen, and, upon request, operate safe, reliable, and sustainable supply systems that provide a range of affordable, quality essential health commodities—drugs, diagnostics, and supplies—to clients in country programs. USAID missions have indicated a strong desire for technical support that strengthens all aspects of in-country supply chains, including forecasting, procurement, distribution, management information systems, quality assurance, storage, infrastructure, and medical waste disposal. While family planning and reproductive health remain a priority in the field and for this project, missions also seek supply chain systems that are designed to handle a range of health products, including contraceptives and condoms; essential drugs; and select commodities for HIV and AIDS, malaria, maternal and child health, and infectious diseases. The project seeks to strengthen supply systems for all essential health commodities and to create environments that are conducive to their sustainability.

The project was awarded as an IQC; individual task orders were issued for specific scopes of work. This IQC semi-annual report provides an IQC perspective of how the project has responded to its overall mandate. It addresses IQC-specific issues and crosscutting themes rather than focusing on the specifics of each task order's activities. Additional task order-specific details are available from the individual task order semi-annual reports. However, we do provide a summary of task order-specific achievements.

To date, three task orders have been awarded under this IQC:

- Task Order 1 on September 29, 2006, by the Office of Population and Reproductive Health to support public health programs, including family planning and reproductive health
- Task Order 2 on March 21, 2007, by the Bureau for Global Health's Avian Influenza and Pandemic Response Unit
- Task Order 3 on April 6, 2007, by the Office of Health, Infectious Diseases, and Nutrition to support the President's Malaria Initiative.

At the IQC level, product availability is supported through the three IQC sub-components:

1. Improve and strengthen in-country supply systems.
2. Improve advocacy and collaboration with global and regional partners for commodity security.
3. Improve USAID's provision of commodities to programs.

Central to efforts under the third sub-component—improve USAID's provision of commodities to programs—is to establish a best-in-class, effective, and responsive global procurement capacity that

is supported by a state-of-the-art management information system (MIS). The new MIS supports the procurement, warehousing, and distribution of products for multiple task orders, including efforts to strengthen global and regional coordination and advocacy for commodity security.

In addition to achieving the project's objective, USAID also wanted the project to do business in a new way—this is referred to as the "new business model" for the project. The guiding principles of the new business model are to accomplish the following:

- Innovate and use best practices in supply chain management.
- Promote database decision making along the entire supply chain.
- Partner with local organizations.
- Use the private sector.
- Use local hires in project implementation.
- Use subcontractor capacities.
- "Lead from family planning."
- Be the *go to place* for information on strengthening public health supply chains.

While retaining a common overall objective to increase the availability of essential health supplies, USAID has implemented and emphasized these IQC sub-components and the new business model differently for each of the three task orders. To the extent possible, the project has included new business model principles in its workplans and monitoring tools under all three task orders.

In this report, we summarize the task orders and their accomplishments during the past six-month reporting period for the IQC; we also describe progress against selected IQC-wide indicators and the new business model.

IQC IMPLEMENTATION

Each task order has a separate full-time management team. That team is the primary point of contact for the task order's COTR. Each team works with its COTR to set task order priorities, budgets, and workplans; and to monitor progress on deliverables, the quality of the work being conducted under the task order, and spending against budgets and obligations. In addition to the task order management teams, several central service teams—country programs, finance and administration, communications, MIS, and supply operations—provide support to each task order. These teams execute and support many of the activities included in the task order workplans.

Each task order promotes improved product availability, but each one also focuses on different products and customers and places a different emphasis on each of the three objectives. Table 1 summarizes key activities across the task orders under the three IQC sub-components. To measure progress against project objectives and against the new business model, the project developed an IQC performance monitoring plan. Each of the task orders has its own plan that contains a subset of the indicators in the IQC plan. Task order plans may also contain indicators outside the IQC plan. For activities in this IQC reporting period, the only common indicators are those that measure USAID's provision of commodities to programs. We also present anecdotal evidence of progress against the new business model indicators. For task order–specific indicators reported during this period, please refer to the individual task order's semi-annual report.

As table 1 shows, each task order continues to emphasize the three IQC sub-components differently. TO1 continues to focus on all three sub-components; field support funding and in-country activities dominate TO1's portfolio. Under TO2, the commodity provision sub-component continues to dominate. Commodity funding dominates TO3's portfolio as well, although field support funding is increasing.

Table 1. Summary of Project Task Order Implementation

	Task Order 1	**Task Order 2**	**Task Order 3**
Start date	September 29, 2006	March 21, 2007	April 6, 2007
USAID technical office	GH/PRH/CSL	GH/AI	GH/HIDN
Sub-component 1: Strengthen in-country systems			
In-country supply chains strengthening (see table 2 for more details on country funding and activities)	Field support provided by 19 countries and 1 regional bureau, with a project presence in 19 countries. Field funding totaled $22,634,000 for FY2009.	Core funding allocated to 4 countries totaling $1,174,209 for FY2009 (Bangladesh, Indonesia, Nepal, Nigeria), with core-funded TA covering an additional 2 countries (Egypt and Thailand).	Field support from Angola, Benin, Ghana, Liberia, Madagascar, Malawi, Mozambique, Nigeria, Rwanda, Senegal, Sudan, Tanzania, and Zambia, totaling $5,748,000 in FY2008 funds and $750,000 in FY2009 early release funds.
Core funding for innovations, best practices, and tool and methodology development (illustrative examples)	With the help of Supply Chain Guru, a supply chain modeling tool by Llamasoft, the project provided USAID and in-country counterparts with a volumetric analysis, demonstrating that contraceptives represent only a small percentage of the products managed in an integrated fashion by the Ministry of Health in Guatemala. Produced a primer, *Ensuring Reproductive Health Commodity Security within a Sector Wide Approach*, to help guide countries that use this funding mechanism.	Implemented the AI Logistics Technical Working Group, which is compiling lessons learned and AI-specific tools into an AI supply chain readiness guide.	Continued work on end use and central-level stock monitoring tools. Took a leadership role in moving the discussion forward at the international level concerning the collection, disposal, and recycling of bed nets.

	Task Order 1	Task Order 2	Task Order 3
Sub-component 2: Improve advocacy and collaboration with global and regional partners for commodity security			
Donor coordination, global advocacy, and resource mobilization	Supported the Reproductive Health Supplies Coalition's (RHSC) efforts to improve CS by being a resource for data and reports for the Supplies Information Database, as well as leveraging in-country CS efforts in Honduras (as the basis for a partnership with Abt Associates, Inc., for the RHSC Innovation Fund) to support a total market initiative. Collaborated with WHO on a model for costing the supply chain and for estimating costs related to scaling up service delivery to meet MDG targets in 49 priority countries. Participated in a WHO/UNFPA/FHI conference to revise *The Male Latex Condom Specification and Guidelines for Condom Procurement*.	Coordinated with other USAID projects to best manage the AIIS stockpile. Worked with USAID/ Regional Development Mission for Asia (RDMA) and international organizations, such as FAO and WHO, in key countries to support global AI preparedness and response efforts.	Worked with key Clinton Foundation staff to discuss steps toward developing an ACT global demand forecasting methodology.
Objective 3: Improve USAID's provision of commodities to programs*			
Product categories	Family planning and other public health commodities	Avian influenza containment commodities	Malaria prevention, detection, and treatment commodities
Commodity procurement in FY2009	$15,872,258	$1,578,846	$36,617,631
Number of shipments in FY2009	196	132	36
Value of shipments in FY2009	$42,826,183	$3,060,559	$36,617,631

* For TO1 and TO2, the number and value of shipments come from the USAID | DELIVER PROJECT web site as of 5/12/2009 and are based on ship date; the value of procurement is the value of purchase orders issued during this period. The number and value of TO3 shipments and procurement comes from the procurement actions report managed by the TO3 team.

IQC INDICATORS

For activities during this reporting period of the IQC, the only common indicators that can be presented in this report are those that measure USAID's provision of commodities to programs. We also present anecdotal evidence of progress in strengthening in-country systems and in implementing the new business model.

Strengthen In-Country Systems

Table 2 illustrates that the project continues to provide a variety of in-country logistics support across the task orders. For TO1, the assistance supports strengthening local capacity across the

supply chain, as well as forecasting, financing, performance improvement, and supply chain innovations. By comparison, technical support for TO2 and TO3 has been primarily focused on forecasting, warehousing, and distribution. In all cases, support is tailored to local priorities.

Table 2. In-Country Technical Assistance Support from October 2008 through March 2009

		Type of commodity							Type of Logistics TA provided								
Country	**Budget**	Contraceptives	HIV/AIDS	Laboratory	Essential Medicines	Avian Influenza	Malaria	Tuberculosis	Forecasting	Finance	Procurement	Warehousing	Distribution	Performance Improvement	LMIS & Monitoring	SCM Innovations	Commodity Security
TASK ORDER 1																	
Bangladesh	$935,019	●									●	●	●	●	●	●	●
Dominican Republic	$408,817	●							●	●	●	●	●	●	●		●
El Salvador	$339,257	●							●	●	●	●	●	●	●	●	●
Ethiopia	$3,707,099	●			●				●	●		●	●	●	●	●	●
Ghana	$904,650	●	●	●				●	●				●	●	●		●
Honduras	$236,032	●							●	●	●			●	●		●
LAC CS	$465,888	●									●						●
Liberia	$99,801	●			●				●			●		●	●		●
Madagascar	$284,408	●			●				●	●		●		●	●		●
Malawi	$1,527,492	●	●	●	●				●	●	●	●	●	●	●	●	●
Mozambique	$1,864,522	●			●				●	●	●	●	●	●			●
Nepal	$661,283	●	●		●				●		●	●	●	●	●		●
Nicaragua	$393,374	●			●				●	●		●	●	●	●		●
Nigeria	$1,295,733	●						●				●	●	●	●		●
Paraguay	$857,330	●							●	●	●		●	●	●		●
Rwanda	$803,327	●	●		●				●	●	●		●	●	●		●
Tanzania	$1,635,102	●			●				●		●		●	●	●	●	●
Uganda	$833,634	●			●			●	●		●		●	●	●		●
Zambia	$10,155,174	●	●		●				●		●	●	●	●	●	●	●
Zimbabwe*	$937,692		●					●					●		●	●	
TASK ORDER 2																	
Bangladesh	$87,656					●						●	●	●	●	●	●
Egypt**						●											
Indonesia	$685,724					●			●				●	●			
Nepal	$91,641					●						●	●	●	●		
Nigeria	$258,059					●			●			●	●				
Thailand**						●						●					
TASK ORDER 3																	
Angola	$89,483			●			●				●	●	●				
Benin	$246,645						●				●	●	●				
Ghana	$272,274			●			●		●		●	●	●	●	●		
Liberia	$533,245			●			●				●	●	●		●		
Madagascar	$649,190						●			●	●	●	●	●			●
Malawi	$1,112,223			●			●		●		●	●	●	●	●	●	●
Mozambique	$1,060,456			●			●		●		●	●	●	●	●		
Nigeria	$47,250						●				●		●				
Rwanda	$584,087						●				●	●	●	●	●		●
Senegal	$500,000						●				●	●	●				
Sudan	$170,000						●				●	●	●				
Tanzania	$380,225			●			●		●		●			●	●	●	●
Zambia	$770,350			●			●		●		●	●	●	●	●		●
Zimbabwe	200,000						●				●				●		

Note: *Zimbabwe distributes condoms for HIV/AIDS not pregnancy prevention, per the Brook Alexander Amendment.
**Core-funded; this country is not tracked separately.

Task Order 1

Since the third quarter of FY2007 under TO1, the project has routinely monitored contraceptive availability at the central and service delivery point (SDP) levels in most of the countries that have a project presence and that receive TO1 funding. Fourteen countries report central-level contraceptive availability, either monthly or quarterly, through the Procurement Planning and Monitoring Report (PPMR). During this period, Bangladesh did not experience any stockouts and six other countries (Ethiopia, Malawi, Mozambique, Rwanda, Tanzania, and Zambia) only experienced one stockout at the central level. Overall, the occurrence of stockouts at the central level decreased significantly over the course of this reporting period, from 12 individual product stockouts in seven countries in October 2008 to only four individual product stockouts in three countries in March 2009.

In almost all countries, reporting rates have risen over the past two years and have remained consistently high, averaging around or well above 80 percent each quarter. In fact, Bangladesh, El Salvador, and Zimbabwe have maintained almost 100 percent reporting rates since FY2007. Likewise, with the exception of Q1 FY2009, when reporting rates dipped slightly, Zambia also maintained almost perfect reporting rates for the past year for antiretrovirals (ARVs). The field office in the Dominican Republic only opened in mid-2008; reporting rates have increased by 67 percent in less than a year since operations began in-country.

For pills, almost all countries have maintained impressively low stockout rates at the SDP level, well below 10 percent, with the exceptions of Malawi and Nigeria. Stockout rates for pills in Nigeria have still averaged very low, at around 15 percent; while slightly higher rates have persisted in Malawi, at an average of 25 percent for the past two years.

Likewise, for injectables, stockout rates have remained on average at or below 10 percent for all countries except Malawi. In Malawi, stockouts of injectables have fallen to an average of around 20 percent in the last year.

Similarly for male condoms, most countries presented here have maintained very low stockout rates at the central level, at or below 10 percent. However, for a few countries—Bangladesh, Malawi, and Nigeria—there have been some fluctuation in the rates over the last two years. In Bangladesh, there were no stockouts at the SDP level in Q3 and Q4 of FY2007; however, there was a huge jump in stockouts starting in Q1 and Q2 of FY2008, due to a procurement crisis, which was eventually resolved when partners in-country took emergency actions. By Q3 of FY2008, stockout rates of condoms in Bangladesh were back down to 30 percent and back to zero by Q4 of FY2008 after the shipments had been dispersed throughout the country and the system was back on track.

Under TO1, Rwanda has seen a significant increase in the use of modern contraceptive methods; the contraceptive prevalence rate increased from 10 percent in 2005 to 27 percent in 2008—an almost threefold increase. This increase presents new funding challenges as the cost of contraceptives increases. Rwanda remains a poor country with high poverty levels and thus limited opportunities for cost recovery. Over the short- and medium-term, most of the burden for contraceptive financing will fall on third party funding sources—donors and the government. Key to continuing contraceptive security is bringing in new donors and continuing or increasing the support of existing ones.

The USAID | DELIVER PROJECT has long advocated for government funding of contraceptive procurement in Rwanda and bringing in new donors. In 2007, a financial sustainability assessment identified government funding and new donors, including the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria (Global Fund), as future options. Government funding of U.S.$100,000 was promised in 2007, but it was delayed due to contractual issues with the United Nations Population Fund (UNFPA), the proposed procurement agent. These issues have been resolved and, beginning in 2008, government funding of U.S.$500,000 was provided for products already on

order. The government has promised to increase this funding by 3 percent per annum over the next few years. In 2008, the Global Fund promised U.S.$3.2 million over four years for contraceptive financing; in addition, the British Department for International Development (DFID), in 2009, provided U.S.$1 million in earmarked funds for contraceptives to the Rwandan health basket fund. Meanwhile, traditional donors, like USAID and UNFPA, continue to provide financial support. USAID is increasing its annual support from U.S.$2.6 million in 2008 to U.S.$3.5 million in 2009, while UNFPA is providing at least U.S.$1 million for contraceptives in 2009. In addition, KFW is providing support to the social marketing sector. The project's advocacy efforts, combined with support for contraceptive forecasting that provides reliable estimates for both commodity and finance needs, has been key to this diversification of support for contraceptive procurement.

Task Order 2

In Nigeria, TO2 worked with an organizational strengthening advisor to develop standard operating procedures and materials to train 37 state desk officers in Abuja on new reporting and dispatch system for AI commodities. As part of the training, state desk officers were trained to manage AI commodities using the logistics management information system (LMIS); and issuing, receiving, and storage procedures.

TO2 project staff worked with the in-country team to develop recommendations for a logistics management system for USAID-donated commodities. Specifically, the group made three recommendations: (1) assign a designated storage space for the commodities, (2) appoint a logistics employee to coordinate the work, and (3) create an interagency cross-sectoral working group. The recommendation to form a committee to oversee the AI Operational Plan was accepted. The TO2 staff with the Animal Health Directorate (AHD) continues to visit the AI high-risk areas of the country (the mid- and far-western regions) to assess the warehouse situation and to streamline the AI logistics systems. The team is working with the Regional Animal Disease Research Laboratory in Dhangadi and in Surkhet; they provided on-the-job training for the warehouse managers on storage standards and stock inventory. The warehouses reported adequate storage space but a lack of storage equipment, including pallets, racks, and cupboards.

Working closely with the Department of Livestock (DLS) in Bangladesh, the project ensured that 200 pails of soon-to expire Virkon would be effectively used and distributed posters about the use of the disinfectant for the wet market poultry merchants. Project staff then conducted follow-up visits to 41 wet markets. Looking ahead to using the remaining Virkon (which expires in August 2009) and the personal protective equipment (PPE) in stock, the project proposed a distribution plan to the DLS. The Government of Bangladesh commended the project staff for their disposal of Virkon and the clearing of the warehouse to accommodate the in-coming shipment of PPE.

In Indonesia, the project, including a technical advisor and PATH/Jakarta cold chain equipment experts, assisted the Food and Agriculture Organization (FAO) partners in preparing for the second vaccination campaign under the Operational Research (OR) program. The team conducted refresher training in logistics and cold chain/vaccine/waste equipment management. All 64 MOA vaccine coordinators from the OR districts attended the training; each coordinator received adequate forms and laminated job aids.

Task Order 3

Over the past six months, TO3 has provided short-term technical assistance (STTA) in Angola, Benin, Senegal, Sudan, Tanzania, and Zimbabwe. This assistance has focused on facilitating the receipt, clearance, and distribution of large shipments of malaria commodities; performing supply

chain analyses; conducting needs assessments; and coordinating future activities with Missions and the Ministry of Health (MOH), often in tandem with other organizations.

Of special note is an emergency indoor residual spraying (IRS) activity in Zimbabwe, which is supported by the project and conducted jointly with DFID and Crown Agents. This was an ad hoc request identified by a USAID team that was in Zimbabwe to assess the cholera outbreak. Task Order 3 provided the following assistance:

- Monitored the implementation of emergency IRS activities with a two-month long STTA to support achievement of the 85 percent room coverage target.
- Procured 250 sprayers, 25 spare kits, 200 nozzles, and 190 nozzle body caps.
- Assisted with carrying out bio-assays to assess the quality of spraying and vector knocks down effect in the Rushinga district.
- Aided the eight provinces to concretely develop future vector control plans and plan for the September 2009 IRS season.

Strengthening in-country supply systems and building greater capacity for improved management of malaria commodities at the local level are key to TO3's success. These actions ensure that commodities procured and delivered through President's Malaria Initiative (PMI) and other key malaria partners reach those in need. The project provides long-term assistance in capacity building in eight countries in Africa.

In Ghana, TO3 assessed, designed, and implemented a plan for clearing through customs, transport, and storage of 350,000 long-lasting insecticide-treated bed nets (LNs) and 1.14 million doses of artemisinin-based combination therapy (ACT), coupled with the monitoring of consumption through nationwide stock status monitoring.

In Liberia, the project developed an Excel-based tool for managing and reporting on malaria commodities, particularly the stock level and consumption rate of each commodity. The project distributed 12,450 LNs to health facilities for routine distribution to pregnant women and children under five in four counties. During May, initial planning was initiated with USAID, the National Malaria Control Program, and other partners for the door-to-door distribution of 430,000 LNs in three counties. Task Order 3 assessed, designed, and implemented a plan for clearing through customs; and transporting and storing 425,000 rapid diagnostic tests (RDTs) and 72,000 treatments of ACTs. Health commodity supply chain management is being enhanced with the development and introduction of supply chain standard operating procedure (SOPs) that will strengthen the logistics management of health products in the country.

Improve USAID's Provision of Commodities to Programs

During the past six months, the USAID | DELIVER PROJECT has developed and implemented system performance scorecards for the three task orders and gathered data for FY2009 to date. There are indicators that enable us to look at operations, supplier, and warehouse and shipper performance (see table 3). An analysis of the results gives us a closer look at the on-time shipment rate and the factors that affect it. An initial review of the FY2009 was conducted by the project's Supply Operations Team in order to determine the root cause of any results that fell below target, and to identify steps for improvement. These were presented to project and task order managers. We have initiated a process for monthly review of the scorecard with each task order.

Table 3. Specific Indicators for Scorecard by Task Order

Task Order	Indicator
Task Order 1	• On-time shipments • Purchase orders issued on time • Delivery notes issued on time • Supplier fill rate • Right quantity received • Right goods received • Goods received in the right condition • Inventory adjustments • Orders shipped on time
Task Order 2	• Shipments arrived on-time to destination port • Supplier fill rate • Right quantity received • Goods received in the right condition • Inventory adjustments
Task Order 3	• On-time shipments • Goods available on time • Supplier fill rate • Right quantity received • Goods received in the right condition • Orders shipped on time

While defined differently by each task order, the common indicator for all three is on-time shipments as a measure of success for the project's supply operations. See table 4 for a summary of results.

Table 4. On-time Shipments

Task Order	Definition	Percentage (%)	Number
TO1	Percentage of **all shipments** received within 30 days of the desired receipt date	57	76/134
	Percentage of **non-condom shipments** received within 30 days of the desired receipt date	70	47/67
	Percentage of **condom shipments** received within 30 days of the desired receipt date	43	29/67
TO2	Percentage of expedited air shipments with actual arrival date no later than two days of order date	N/A	0/0
	Percentage of standard air shipments with actual arrival date no later than seven days after the desired receipt date	95	21/22
	Percentage of ocean shipments with actual arrival date no later than one month of the desired receipt date	100	4/4
	Percentage of land shipments with actual arrival date no later than one month of the desired receipt date	100	5/5

Task Order	Definition	Percentage (%)	Number
TO3	Percentage of shipments shipped within 10 days of the scheduled shipped date	100	28 /28

We continue to have a high level of procurement activity under all three task orders, as shown earlier in this report in table 1.

Management Information System

The USAID | DELIVER PROJECT MIS plays a central role in the project's efforts to increase the availability of essential health supplies. Since the transition to the new MIS almost a year ago, more than 1,800 orders have been processed successfully in the system, and a steady stream of new users are signing up to view reports on the project's website. To view MIS performance metrics, see appendix A.

In the first six months after the system was launched, we received many requests for changes and improvements; we continue to address them in priority order, while working within available human and financial resources. To ensure that the most critical problems are addressed first, we have established a Change Control Board (CCB) process, which enables USAID and other stakeholders to provide input and also assesses the business impact of specific issues.

MIS Achievements

During this reporting period, the MIS team completed the date alignment project, which considerably improved the handling of numerous dates throughout the system and addressed the related operating procedures. Smaller improvements were made to the ORION suite and the USAID | DELIVER PROJECT website. Consideration for new MIS projects awaits the completion of ongoing discussions with USAID regarding additional electronic data interfaces.

In late summer 2008, the MIS team received the final report from the MIS advisor, who had conducted an Independent Verification and Validation of the USAID | DELIVER PROJECT and the Supply Chain Management System (SCMS) MIS projects. The team responded to all actionable recommendations, which included creating a communications plan, disaster recovery plan, and risk management plan; expanding the performance metrics report and the service level agreement; creating proposals for a new documentation project; completing lessons learned documentation; updating infrastructure documentation; providing a new monthly report on time spent by project function; and presenting estimates for various levels of system maintenance.

During this reporting period, we held task order–specific trainings for USAID and project staff from the three task orders. The goal was to provide training for those who had joined the team since the system was launched in April 2008 and, also, to focus on issues specific to each task order. We were able to identify system and process issues during the sessions—as well as areas of improvement—which were logged and prioritized through the CCB process.

The MIS team participated in meetings with SCMS to explore opportunities for collaboration and potential cost sharing. As we move forward with new development projects, we will be looking to continue this collaboration. USAID's MIS advisor facilitated these meetings.

IMPLEMENTATION OF THE NEW BUSINESS MODEL

USAID conveyed to project management that they wanted the project to do business in a new way. The project has incorporated that requirement in its workplans and monitoring tools under TO1 and, to the extent possible, in the other task orders. Each task order has its own priorities under the IQC; TO2 and TO3, while they support the entire new business model, have emphasized different aspects. The new business model does not have specific indicators in the project performance monitoring plan; progress against these requirements is described qualitatively in the next section.

INNOVATE AND USE BEST PRACTICES IN SUPPLY CHAIN MANAGEMENT

To improve product availability, USAID challenged the project to seek innovative technical, procedural, and policy solutions. The project has responded at the country level and the central level. Each of the task orders has pursued innovations and best practices throughout their operations and each has demonstrated the pursuit or adoption of innovative approaches.

Task Order 1

Network Optimization Tool

To help with the analysis of the public health logistics systems, the project selected a software application—called Supply Chain Guru by LLamasoft. Supply Chain Guru is a supply chain modeling and simulation software application; data about a supply chain is entered or imported, and the software predicts the performance, operationally and financially, subject to different constraints. The software was first piloted in Guatemala in 2008, and it was presented to the USAID Mission in Guatemala City in March 2009. Using Supply Chain Guru, the project was able to provide USAID and in-country counterparts with a volumetric analysis demonstrating that contraceptives represent only a small portion of the products managed in an integrated fashion by the Ministry of Health. The analysis showed that even if family planning programs were to expand, or even double, the volume that this represents would not have a significant impact on storage or transport requirements. But, the analysis also showed that if the supply chain encounters significant increases in products that account for a large proportion of the volume, current warehouse and transport capacity may be insufficient. This type of analysis gives the Ministry of Health the information they need to consider different options, such as changing the inventory policy, or investing in additional warehouse and transport capacity, thus protecting the different program products, including those needed for family planning. Following the project's successful use of Supply Chain Guru in Guatemala, the World Bank applied the software in Kenya and Lesotho; they are planning other country applications with the possibility of developing a supply chain strengthening loan portfolio.

Post-Shipment Testing of Condoms

The project completed a short paper on the conditions for and processes of post-shipment testing of condoms. This paper discusses the rigorous testing that condoms, funded by USAID and other donors, go through prior to shipment. As a result of this paper, a Ministry of Health representative from Uganda stated that he would recommend a review of their policy for post-shipment testing of condoms; he would recommend that condoms supplied by USAID and other donors be exempt from post-shipment testing because they go through such rigorous pre-shipment testing.

Paper on Delivery Team Topping Up

The project recently published a paper, *Delivery Team Topping Up: Bringing About Reliable Distribution in Difficult Environments,* that explains how the Delivery Team Topping Up (DTTU) model, used by the commercial sector—primarily the soft drink industry—is one option that has been successfully applied to ensure product availability. Using an example from Zimbabwe, the paper shows how DTTU is a good option for difficult environments. Stockouts of condoms in two pilot provinces were at 20 percent prior to the implementation of the DTTU; stockouts fell to an average of 2 percent after DTTU was running. Because of these positive outcomes with condoms and contraceptives, some HIV and AIDS products have been added to the DTTU.

Council of Supply Chain Management Professionals

For the first time in its history, the Council of Supply Chain Management Professionals (CSCMP) dedicated a full track to international public health and humanitarian supply chains at its Global Conference held in Denver, Colorado, from October 5–8, 2008. This track, entitled "Matching Supply and Need in Resource-Constrained Settings," was co-led by the USAID | DELIVER PROJECT and the Massachusetts Institute of Technology (MIT)-Zaragoza International Logistics Program. USAID, Oxfam, World Health Organization (WHO), the Clinton Foundation, and others made presentations. The conference was attended by more than 3,000 supply chain professionals from 42 countries, including more than 200 educational sessions, split into 25 focus-area tracks.

Collaboration with the World Health Organization in Costing the Supply Chain

Since the project began, the SCM team has worked with WHO and the World Bank on developing an approach for supply chain design/optimization, including software. Part of the work has focused on developing a methodology for costing the supply chain, which is a requirement for software use. Recognizing the project's leadership in international public health supply chain management, WHO requested the project's assistance in estimating the logistics costs of achieving the health-related Millennium Development Goals (MDGs) in 49 low-income countries. This is part of a global effort to determine the total cost of achieving the health-related MDGs in those 49 countries, including the cost of expanding services, product cost, etc. The results will be presented at the G8 summit in July 2009, as well as at the United Nations General Assembly and the World Bank/IMF meetings in the fall 2009. As advocacy before the July G8 summit, WHO will be publishing a joint WHO and USAID | DELIVER PROJECT paper in the online WHO Bulletin in June.

Task Order 2

The TO2 team created a logistics technical working group as a way to gather and record staff experiences and findings in emergency management of avian influenza (AI) commodities. The team is compiling the collective lessons learned in a concept paper written by staff members. AI–specific tools will be developed to guide recipient countries and international partners in managing AI commodities.

The TO2 team conducted a quality assurance review of the MAP International warehouse in Savannah, Georgia. As part of this assessment, we reviewed the warehouse lease and insurance. It was determined that the project needs less space in the warehouse; the warehouse space will be decreased to 40,000 feet. The project has been guaranteed the first right of refusal for an adjoining warehouse bay should our needs increase. After review, it was also decided that, after the donation and disposal activity is complete, the insurance coverage for the stockpile commodities should be revised to reflect the reduction in stockpile holdings.

Based on the field test of the Depopulation, Decontamination, and Disposal (3-D) Kit and the Surveillance Biosecurity (SBS) Kit, the project revised the kit contents and procured a small number of each kit. Further procurement of larger quantities will depend on USAID's decisions on the role these new kits will play in the overall USAID AI decontamination strategy. The project worked with USAID, the STOP-AI Project, and AI.COMM to revise the pictorial user's guide insert developed for the newly designed 3D and SBS kits.

Task Order 3

TO3 made a significant contribution by developing two manuals—with the World Health Organization's Regional Office for the Western Pacific (WPRO) and the Foundation for Innovative New Diagnostics (FIND)—for the transport, storage, and handling of malaria RDTs (1) at central and peripheral health care facilities and (2) at health clinics. The pocket guides provide instructions on the correct storage temperature, stock rotation, safe disposal, etc., of malaria commodities. More and more countries are adding malaria RDTs to their malaria case management guidelines; to prevent a decrease in their efficacy, it is crucial that they have up-to-date instructions on how to correctly handle the tests. Drafts of the manuals were completed during this reporting period; 20,000 copies of the manuals will be printed in the next six months and shipped to country offices and implementing partners.

PROMOTE DATA-BASED DECISION MAKING FOR THE ENTIRE SUPPLY CHAIN

Promoting data-based decision making continues to be a priority under all three task orders. In January 2009, the USAID | DELIVER PROJECT, Task Order 1, in collaboration with project sub-contractor Abt Associates Inc., assessed the costs of the ARV supply chain in three districts in Zambia—Lusaka, Mpongwe, and Ndola. This activity was the first pilot of the Supply Chain Costing Tool, a resource developed by Abt Associates, Inc., and the project to assist in-country supply chain managers by providing *big picture* cost estimates of the entire supply chain, as well as the costs of specific supply chain functions (procurement, storage, and transportation) at different tiers and types of facilities (urban/rural, high/low volume). These cost estimates provide data to support supply chain planning and management, advocacy for increased funding to strengthen the supply chain, and pricing policy design.

The development and pilot of the supply chain costing tool were conducted using the project's core policy team funding; it drew on the state-of-the-art experience in the private/commercial sectors. Based on the experience in Zambia, further refinement of the tool will be made to prepare for a second pilot in Year 3 of the project. The final outcome will be a standardized supply chain costing tool that can be used in any country for supply chains that manage any health commodity.

Under TO2, the freight team works closely with supply operations to conduct ongoing price reasonableness studies. The supply operations team requests a separate freight estimate from the Fuel Logistics Group (Pty) Ltd. for every fifth shipment. This study ensures that the freight provider, UPS, is offering the project the best prices when we ship Avian Influenza International Stockpile (AIIS) stockpile commodities. The supply operations team maintains the price reasonableness data; they will report it, as needed.

To help countries manage the AI commodities they receive from USAID, the project created and distributed a stock assessment survey for priority recipient countries. Task Order 2 will use the information to improve their forecasts for future shipments and technical assistance.

TO3, worked collaboratively with the PMI, USAID, and Management Sciences for Health/Strengthening Pharmaceutical Services (MSH/SPS) in developing the End-Use Malaria Monitoring Activity (EMMA.) The primary objective for the EMMA is to monitor and assess the availability of malaria commodities at the health facility–level, as well as, using patient registers and other written records, obtain information about malaria case management. TO3 field tested the EMMA in Tanzania in January and February of 2009 and adapted it based on the findings of that test. The field test successfully provided information about malaria commodity availability and case management at the patient level that was not being obtained through any other method. The EMMA was subsequently implemented in the TO3 countries of Zambia and Malawi; it is scheduled to go forward in all PMI countries by the end of 2009. To ease the burden of gathering and analyzing such a large amount of data every quarter, TO3 is looking into cell phone data collection for this activity; data would be reported to a central database where it could be quickly analyzed and used for decision making.

PARTNER WITH LOCAL ORGANIZATIONS INCLUDING THE PRIVATE SECTOR

The USAID | DELIVER PROJECT continues to demonstrate its commitment to strengthening local and regional capacity and engaging local organizations in-country, including those in the private sector, across task orders.

Task Order 1

Under TO1, the project has focused on capacity building of regional training institutions, facilitating training courses related to commodity security and supply chain management, and supporting the International Association of Public Health Logisticians (IAPHL).

Regional Training Institutions

One of the recent efforts of the organizational strengthening team has been to build the capacity of the Eastern and Southern Management Institute (ESAMI) in sub-Saharan Africa to provide training courses around logistics functions and supply chain management. ESAMI, headquartered in Arusha, Tanzania, was selected as the regional institute for sub-Saharan Africa. ESAMI and the project agreed on a fixed-price purchase order with specific deliverables that will build their capacity to plan, prepare, and conduct two courses: "Overview of Supply Chain Management and Quantification" and "Procurement Planning." ESAMI submitted their training plans to the project; seven ESAMI personnel attend the "Overview of Supply Chain Management" course and the "Quantification and Procurement Planning" course held in Arusha in October 2008. Between courses, the same seven personnel participated in full-day sessions designed to orient them to the curricula for each course, address any questions or issues related to either supply chain technical issues or training methodologies used by project facilitators, and practice specific parts of the courses, as necessary.

In Latin America, the project continued to work with *Proyectos en Informática Salud Medicina y Agricultura* (PRISMA) to build capacity for a Latin American and Caribbean Regional Institution. As part of this, the second purchase order for PRISMA was approved and issued by the Office of Acquisition and Assistance (OAA). PRISMA began planning to conduct three modules ("Overview of Supply Chain Management," "Quantification and Procurement Planning," and "Commodity Security: Principles and Practice") between January and June 2009.

In February, PRISMA used their funds to conduct a tour of Central America to identify potential course venues. As a result, they have identified both dates and locations for their three upcoming

courses, including the "Overview for Supply Chain Management," which will be held from May 25–29; the "Quantification and Procurement Planning" course, which will be held from June 1–5; and "Commodity Security: Principles and Practice," to be held from June 22–26 in Lima, Peru. PRISMA began disseminating the course announcements on March 31, 2009.

Pre-service Training

Task Order 1 continues to demonstrate its commitment to strengthening local and regional capacity through pre-service training initiatives. Project advisors have developed the supply chain portion of the Unit II curriculum for Pharmacy Technicians at Malawi College of Health Sciences (MCHS); it is ready for implementation. The Malawi College of Health Sciences and the USAID | DELIVER PROJECT country office will meet in April 2009 to determine when the program will begin. Two other countries, Ethiopia and Rwanda, are in the initial phases of developing pre-service training programs. In Rwanda, an initial assessment is scheduled for late June. In Ethiopia, a project advisor visited institutions in two regions in March (SNNPR region in Hawassa and Tigray Region in Mekele) to promote and assess the feasibility of developing a pre-service training program. Next steps were developed to start the implementation of logistics courses in four schools of health in the SNNPR region and two schools of health in the Tigray Region.

Logistics Management Information Systems

In Honduras, the Ministry of Health partnered with a local software company to help automate the LMISs with the previous DELIVER project. Recently, a local software development company, Intersoftware, was contracted to custom design an information system to local specifications and to train logistics managers in how to use this system to manage their inventory and information system. Using a local software company has helped ensure that the data systems are customized to local specifications, requirements, and limitations; built local capacity to develop automated logistics information systems; and helped guarantee effective follow-up to ensure that local staff are trained. The system is functioning appropriately in part because of the company's local presence.

Task Order 2

Under TO2, the project has worked with local governments and implementing partners to develop in-country workplans for AI programs in Bangladesh, Nepal, and Nigeria. In Indonesia, TO2 has worked extensively with the National Committee for Avian Influenza Control and Pandemic Influenza Preparedness (KOMNAS FBPI) to coordinate the Operational Research program in that country. In addition, the project continues to work closely with the United Nations FAO in Indonesia and the vaccine supplier, PT Medion, to ensure the on-time delivery of the commodities to the districts.

To best support the in-country AI teams, TO2 coordinated with the manufacturer of the injection supplies and power washer equipment to have field staff trained on the use of these supplies and the equipment being provided to them. Additionally, the project has arranged for the manufacturer to provide maintenance for the products.

Task Order 3

To achieve its objectives under TO3, the project continues to work with in-country partners and to strengthen local capacity. In Madagascar, the project conducted a training—with 25 high-level officials of the MOH, and family planning and counterpart organizations—for the logistics management of health commodities (such as those used for malaria). In Ghana, health services staff and project staff were trained in supply chain management and quantification through the project-sponsored ESAMI course in Tanzania. In addition, the project provided technical assistance on the

logistics management component of the National Malaria Control Program's (NMCP) home-based management of malaria proposal.

Task Order 3 continued to support the NMCP in the implementation and ongoing management of a functional bed net database that provides an overview of multiple channels of bed net distribution in Ghana. Specific to this activity, the project worked closely with key partners to coordinate the availability of reliable data to further contribute to providing support to the NMCP for strengthening the management of national public/private LN partnership systems in Ghana.

In Liberia, the project is helping to develop supply chain SOPs that will strengthen the logistics management of health products in-country. Through structured trainings, as well as on the job training, they have continuously supported colleagues in the Ministry of Health and Social Welfare, NMCP, and the National Drugs Services on supply chain management, including best practices for storage and quantification.

In Senegal and Benin, the project contracted with private transporters and nongovernmental organizations (NGOs) to deliver bed nets to the district level.

Through these and other efforts, TO3 seeks to use and improve local capacity to ensure sustained and efficient malaria programs in the countries where we work.

UTILIZING LOCAL HIRES IN PROJECT IMPLEMENTATION

The project has many national and regional country directors and key staff, demonstrating our commitment to using local and regional hires for project implementation. At the country director–level, staffing has not changed during the last six months, with the exception of a new project office in Liberia, which is led by a regional hire. Only five offices of the 18 with TO1 field support (28 percent) were led by U.S. citizen country directors (Ethiopia, Mozambique, Tanzania, Zambia, and Zimbabwe).

Five countries now have local staff developing the contraceptive procurement tables (CPTs), with no outside assistance. In an additional 14 countries, local staff work on the CPTs with limited technical assistance.

Under TO2, Indonesia has been a critical battleground in containing H5N1 AI. USAID gives substantial support to the government of Indonesia in organizing sophisticated AI surveillance and emergency response systems. As part of this assistance, the USAID | DELIVER PROJECT has been asked to advise USAID/Indonesia and its partners: the Ministry of Agriculture, United Nations FAO, and the International Livestock Research Institute (ILRI). Responding to that need, the newly recruited local staff— an in-country manager, logistics specialist, and financial specialist—provide technical expertise in designing logistics networks for poultry vaccination campaigns and monitoring their progress in the field, and coordinating the distribution of vaccines and cold chain equipment for vaccination campaigns.

Nepal's National Avian Influenza Response Plan, developed in 2005, sets forth activities and approaches for AI preparedness, containment, and outbreak response. Logistics management was identified as a part of this plan. Task Order 2 has been identified to provide technical assistance to the logistics management system for AI supplies. The local team in Nepal includes a program officer/AI logistics officer and a senior specialist in systems and policy; they provide management oversight to local logisticians for monitoring these logistics activities.

In Bangladesh, as part of the FAO plan to combat AI, a decontamination strategy was identified. Bangladesh was named a priority country and USAID has asked TO2 to procure commodities to

support the decontamination activities. The locally hired team that manages the USAID | DELIVER PROJECT office in Bangladesh help to support the decontamination strategy and execute the continuing AI work in that country.

To achieve its objectives under TO3, the project built on the existing field office staff and hired a regional hire Malaria Logistics Advisor in Malawi and local hire Malaria Logistics Advisors in Rwanda and Mozambique. In Zimbabwe, to carry out emergency indoor residual spraying (IRS) activities under TO3, the NMCP conducted a three-day training for approximately 800 spray operators. The majority of the spray operators used for the emergency IRS activities were local community members from one of the 20 districts involved in the spraying. In some instances, field orderlies or general hands from the district hospitals also participated in the spray teams; in two districts, members of Zimbabwe's national air force were integrated with the local spray operators. The teams were gender sensitive; women worked as spray operators, camp guards, and in supervisory positions. All team members received monetary compensation for the 50 days they worked during the emergency IRS campaign, in addition to food provisions.

USING SUBCONTRACTOR CAPACITIES

The project continues to expand work with its subcontractors, both through on-site staff and short-term assistance. The project benefits from the technical expertise of its subcontractors on specific projects. Most recently, Abt Associates Inc., assisted with the development of a supply chain costing tool, which collects information on procurement, storage, transportation, and commodity costs from all tiers of the logistics system. The first pilot of the tool in Zambia was completed in January and February 2009. Additionally, PATH provided significant assistance on the procurement excellence work, including the completion of the condom procurement strategy and new work on the injectables procurement strategy. Under the procurement excellence work, Crown Agents has been engaged to provide technical expertise for freight forwarding contract analysis. Full–time staff from PATH, Crown Agents, and The Manoff Group, Inc., contribute to TO1's work at the project's headquarters.

Under TO2, as part of the efforts in Indonesia to design logistics networks for poultry vaccination campaigns, the project's subcontractor, PATH in Jakarta, provides two local senior experts in cold chain and vaccination equipment management. The project team was recently asked to provide technical support to the Government of Indonesia in designing and implementing a vaccination intensification campaign. Its role will focus on building the Ministry of Agriculture's human capacity in logistics and cold chain management through extensive training and mentoring programs.

To achieve its objectives under TO3, the project has implemented a strong quality assurance (QA) program to ensure the malaria commodities that PMI provides meet the highest standards. Family Health International (FHI) leads this QA program; to ensure that the QA SOPs are up-to-date and functioning properly, they have regular interaction with the TO3 team regarding new developments with products and manufacturers. TO3 also continues to use UPS for freight forwarding, where appropriate, including large ACT shipments forwarded to Angola, Malawi, Kenya, and Uganda during the reporting period. UPS' tasks include freight estimate preparation, vendor door pickup, freight booking, shipment tracking, customs clearance, and final recipient delivery.

"LEAD FROM FAMILY PLANNING"

Leading from family planning means applying to other health commodities the experience, best practices, lessons learned, tools, and approaches that were developed for family planning logistics systems and contraceptive security under the Family Planning Logistics Management (FPLM) and DELIVER contracts. This leadership from family planning/reproductive health (FP/RH) helps ensure that family planning retains a seat at the table when wider health system reforms and system integration are being designed and implemented.

During the last six months, several examples include—

- Logistics systems were recently designed to manage tuberculosis (TB) commodities in Zimbabwe; it will be piloted beginning in July 2009. TB drugs for continuation facilities will be integrated into the DTTU system. The DTTU system was started in 2003 as a logistics system for condoms and contraceptives. Existing LMIS records for the DTTU system (originally designed for family planning commodities) were adapted to accommodate TB drugs.
- Working through the Uganda Expanded Programme on Immunization (UNEPI), Uganda's Ministry of Health is responsible for providing safe, potent vaccines to all eligible children and women of childbearing age in the country. An effective, reliable cold chain is essential for maintaining the recommended vaccine storage temperatures. An estimated 78 percent of health facilities rely on bottled gas as the primary energy source for their cold chain; however, efforts to maintain the correct temperatures were hampered by gas shortages, possibly related to gas cylinder shortages at health units and the district vaccine store. Under TO1—using sound family planning and logistics storage practices, and after studying the magnitude of the cylinder shortage situation—the project offered recommendations for improving the gas supplies management. A new system was developed for monitoring gas cylinder movement and gas utilization at all levels. By applying these sound logistics principles to gas supplies management, the program can improve cold chain functionality, protecting vaccines while increasing transparency and accountability for gas movement and use. To continue to support this effort, a TO1 logistics coordinator is working onsite with UNEPI to support Uganda's immunization program.
- In Malawi and Rwanda, under TO1, the project's approach to contraceptive quantification—focusing on using *logistics data* to inform—has expanded the forecast to other essential medicines. In Malawi, the project carried out a national quantification and procurement plan for more than 100 essential medicines. Participants in the forecasting exercise included members of the Central Medical Stores, national TB Program, National Malaria Control Programme, the Reproductive Health Division, HIV/AIDS Unit, dental program, and representative from the districts and the MOH Pharmaceutical Department. After the forecast was complete, PipeLine software was used to prepare procurement plans for all supplies. In Rwanda, a similar exercise took place in February 2009. In addition to contraceptives; maternal and child health commodities, including ergometrine, oxytocin, iron/folic acid, magnesium sulfate, amoxicillin, zinc, oral rehydration salts, mebendazole, and vitamin A, were quantified. The outcome from the quantification exercise determined a current overstock for child health commodities. For maternal health commodities, however, a supply gap was noted.
- Under TO2, the project used its experience in developing contraceptive ordering procedures, guidelines, and product specifications in a user-friendly format to create a product catalog for AI

commodities. The catalog includes product specifications, instructions for product use, and shipping and ordering instructions for commodities used to detect AI. During the past six months, the catalog was updated to include new commodities and to accurately reflect USAID's AIIS. Like the *Contraceptive Procurement Guide* and *Product Catalog*, the *Avian Influenza Product Catalog* is a popular tool.

- The monthly update, developed by TO1 to routinely update USAID and project staff on task order activities, has been adapted by TO2 and TO3. TO2 prepares and distributes a monthly update of task order activities to USAID, project, and mission staff. The update also includes a shipment and inventory report for that month. This tool has proven to be an excellent way to keep TO2 stakeholders up-to-date on task order activities, and it is an invaluable record of activities undertaken by the task order.

THE "GO TO PLACE" FOR PUBLIC HEALTH SUPPLY CHAIN IMPROVEMENT

Information-sharing and Dissemination

The statistics on the project website use are indicative of the demand for information from the field. During the last six months, the project website had more than 152,000 visits and more than 80,000 publications were downloaded from the website—an increase of 30 percent from the previous year.

The project has also fulfilled orders for more than 3,000 print publications, representing a 20 percent increase since the last reporting period. Project tools, publications, and software were requested by individuals and organizations in more than 49 countries. The top three publications disseminated by mail were (1) *Resources for Managing the HIV and AIDS and Laboratory Supply Chains software* CD; (2) *Guidelines for the Storage of Essential Medicines and Other Health Commodities*; and (3) *Logistics Handbook: A Practical Guide for Supply Chain Managers in Family Planning and Health Programs.*

The USAID | DELIVER PROJECT also completed 41 new or updated publications and disseminated them electronically to many partners and stakeholders through various global health–related newsletters, listservs, and websites to raise awareness of USAID and the project's efforts in health logistics and commodity security.

Technical Leadership

The project continues to provide advisory services for most consultants who visit Ghana to work on family planning, either on the recommendation of USAID or the MOH/Ghana Health Services. These services are based on our understanding and appreciation of the challenges and issues, especially the work we do with the Interagency Coordinating Committee for Contraceptive Security. Recently, we assisted consultants from the Hewlett Foundation and Redstone Strategy on their mission in-country to look at the potential for advocacy to support family planning commodity security concepts. We also hosted three interns from the School of Public Health in our offices to acquaint them with our work, particularly in family planning. As the project works with them, we share the strategies that are in place to ensure the capacity building of local personnel to undertake logistics-related technical activities and contraceptive security. We discussed challenges that affect family planning commodity access; we hope our interactions will help create new champions for family planning.

As part of the ongoing efforts to document the strategies and best practices for contraceptive procurement overall and by specific product type for TO1, current work is focusing on injectables. The USAID | DELIVER PROJECT is taking the lead on convening an experts' meeting in

Washington, D.C., on injectables to discuss desirable and feasible product specifications, quality assurance and standards, testing, and contract terms and conditions to inform a procurement strategy. This strategy will include market trends, technical specifications, eligibility criteria, risk management, contract strategies, and monitoring and evaluation. The project has also initiated an analysis of freight-forwarding contract strategies for contraceptive procurement. We have also engaged our partners to perform some of the analysis of shipment history for TO1 to help inform the final study.

INDIVIDUAL TASK ORDER ACHIEVEMENTS

Each task order has produced its own semi-annual report, according to its contract and COTR instructions. Presented here are selected highlights from each task order over the past six months.

Task Order 1—Public Health

The project continues to effectively demonstrate its commitment to a customer-oriented approach, with a focus on the project's goal of improved availability of public health commodities for our clients. The project has seen continued progress towards strengthening contraceptive security (CS), both in the USAID | DELIVER PROJECT presence countries and globally.

During the past year, the project achieved many promising results and successes; showcased below are a sample of key highlights, accomplishments, and compelling outcomes from the project's activities and technical assistance. Also, shipment totals over this reporting period are summarized in figure 1.

In-Country Successes

- Reporting rates remain high in the project's countries, nearly 90 percent or higher in the majority of countries, with significant improvement in Zambia, Nigeria, and the Dominican Republic. At the SDP-level, stockouts for the three most popular contraceptives—oral contraceptives, injectables, and male condoms—remain at levels of approximately 10 percent or lower in most of the project's presence countries.
- At the central level, for 13 project countries regularly reporting to the PPMR, seven countries experienced either no stockouts or one stockout over the period; in each case, the stockout was for a short time (one month or less).
- Rwanda has seen recent gains in reducing unmet need for family planning with contraceptive use increasing almost threefold in just three years. This creates an increase in funding requirements; the project has advocated successfully for diversifying the donor base and increasing funding levels by existing donors. The government of Rwanda has begun contributing to contraceptive procurement; the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) also agreed to fund contraceptives (and not just condoms)—a significant breakthrough globally for contraceptive security and one for which the project has long advocated. The project rapidly spread the word on Rwanda's example; Ghana and Zambia included condoms and all contraceptives, respectively, in their Round 8 GFATM proposals.
- In El Salvador and Ethiopia, the project built capacity at the regional levels in forecasting to strengthen CS. In El Salvador, the project trained key regional staff in the use of PipeLine software for procurement planning to ensure that they have accurate and reliable estimates of their contraceptive financing needs. This will enable the regions, and the national level, to advocate for adequate financing for funding from the Essential Drugs Unit. Ethiopia devolved

significant powers to its 11 regions (including three urban areas). For both advocacy and budgeting, the project facilitated training in forecasting with the regions for the past two years. Teams from the regions carried out regional-level forecasts, which, in turn, are submitted to the Federal Ministry of Health (FMOH) to inform their national forecast. Not only has this improved decision making for national procurement planning, it has also raised the profile of contraceptive security in the regions.

Global-Level Partnerships

- The project strengthens relationships with global partners for CS and to influence policy at the global level; it is the main contributor to the PPMR, which provides central-level availability data to the Reproductive Health Supplies Coalition's (RHSC) Countries-at-Risk (CAR) group and highlights impending supply issues. Non-project countries also contribute; the PPMR played a significant role in highlighting stockouts in Kenya, which lead to emergency donations from UNFPA.
- The project developed a global gap analysis for contraceptives, *Contraceptive Projections and the Donor Gap: Meeting the Challenge*, published under the RHSC banner—a key advocacy tool for the future. Sector wide approaches (SWAp) for health programs and their oft-associated basket financing mechanism present enormous challenges for financing and procurement.
- To help guide countries, the project produced a primer, *Ensuring Reproductive Health Commodity Security within a Sector Wide Approach*, which focuses on how different funding mechanisms can be used, in combination, to improve reproductive health contraceptive security (RHCS), and how the SWAp provides both risks and opportunities for CS. The findings and considerations were presented at the Maximizing Access and Quality (MAQ) Mini-University; they have been used to highlight country challenges and opportunities with stakeholders, including the RHSC and reproductive aid.
- To support supply chain decision making, the project is developing a supply chain costing tool that was piloted in Zambia. Global partners, like the World Bank and the WHO, are very interested in this tool. In a related piece of work, the project worked with WHO to estimate the logistics costs of achieving the health-related MDGs.
- To share best practices and supply chain information, the project also co-led an international public health supply chains track at the Council of Supply Chain Management Professional Global Conference; other presenters included USAID, Oxfam, WHO, and the Clinton Foundation, and others.

Scorecard Development and the MIS

- The project's procurement team finished developing a system scorecard, including indicators for operations and supplier performance. Most targets were met for on-time delivery, fill rates, and vendor performance.
- The project successfully completed the award of a new contract for male condoms to three off-shore suppliers. In addition, contract extensions and/or additional contracts were issued for intrauterine devices (IUDs), implants, and oral contraceptives. The transition to the three new oral contraceptive brands is close to completion; the product has already been shipped to Tanzania and Ghana.

- The implementation of the new MIS continues and more than 750 orders have been processed in the system. Improvements continue as we respond to requests for changes, with the completion of the date alignment project as a highlight. Also, a Task Order 1 specific training was held for USAID and project staff.

Fostering Local Partnerships

- The USAID | DELIVER PROJECT continues to emphasize partnerships with local organizations and the use of local capacity. Training efforts continue in project countries—more than 7,500 in-country staff were trained, mainly MOH personnel.
- Significant progress has been made in the project's partnership with a local training institution, the ESAMI, which is based in Tanzania. ESAMI staff were trained as facilitators for two project training courses; they organized and led the "Overview for Supply Chain Management Course" in Tanzania, training 34 participants from 13 countries.
- In Latin America, our local partner, PRISMA, began planning for three courses, the "Overview," as well as "Quantification and Commodity Security" modules. Meanwhile, the project completed and piloted the latest training module on monitoring and evaluation.

Extending Family Planning Work into Other Commodity Areas

- Efforts continue to extend the project's work in family planning into other commodity areas—leading from family planning. The successful DTTU system in Zimbabwe, initiated originally for contraceptives, now includes HIV supplies; it is being extended again, this time for TB supplies.
- The project's successful approach to forecasting and quantification—data-driven forecasting linked to procurement planning, and involving multiple partners—was again used in Malawi to forecast more than 100 essential medicines across several programs, including family planning, TB and HIV/AIDS; and, in Rwanda, for maternal and child health supplies.

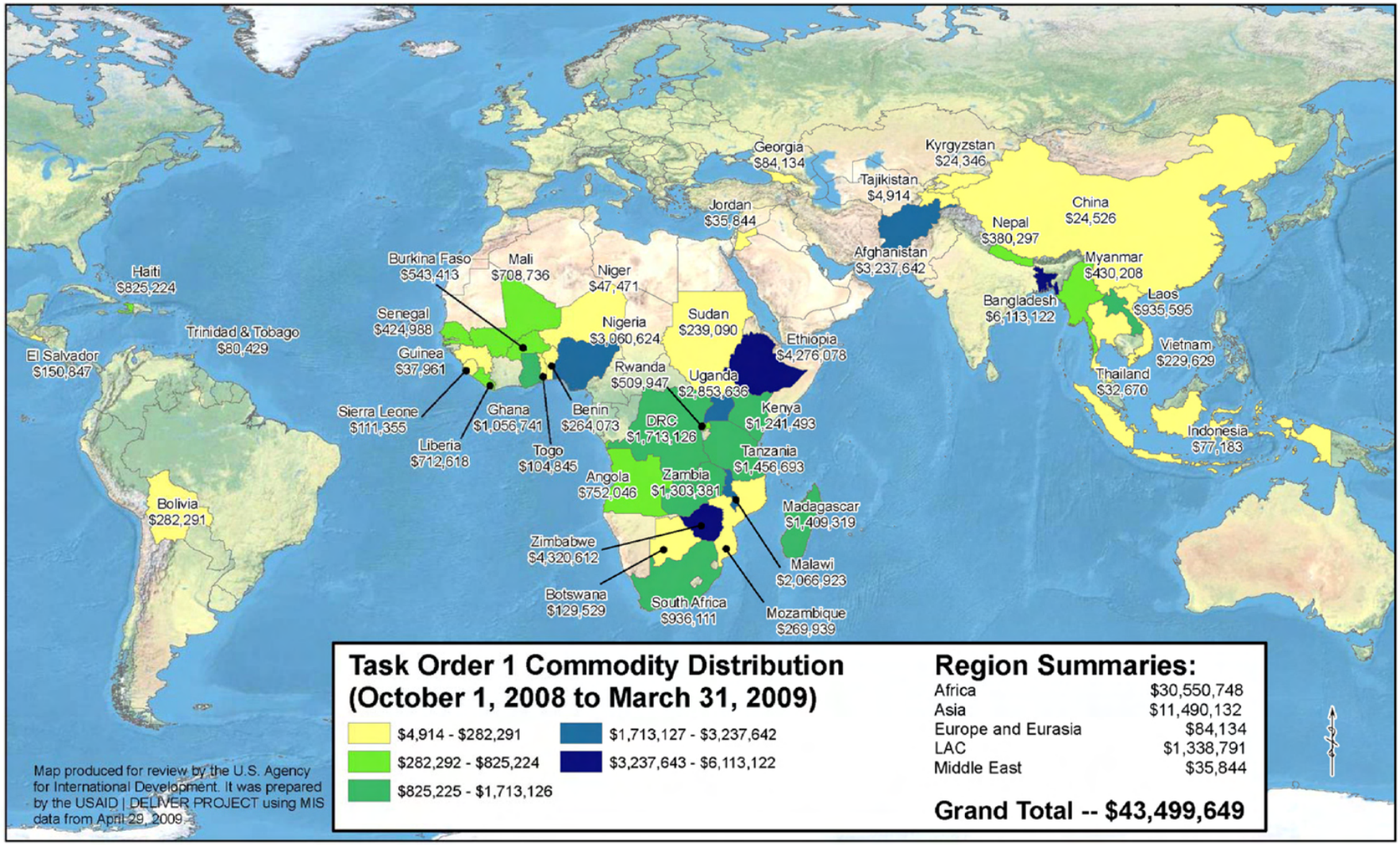
Sharing the Project's Best Practices and Lessons Learned

- To raise awareness of USAID and the project's efforts in health logistics and commodity security, the USAID | DELIVER PROJECT continues to disseminate the project's information, materials, and results electronically to many partners and stakeholders. The number of publications downloaded from the project website continued to increase—up 30 percent from the previous year; the number of print copy orders also increased significantly. The project completed or updated 41 publications during this reporting period.
- Through a series of policy briefs and continued advocacy efforts, the project worked to raise awareness about opportunities to procure contraceptives with Global Fund financing. In particular, the project developed a "Global Fund Supports Reproductive Health Commodity Security" brief, which shows how the Global Fund Round 8 provides opportunities to fund reproductive health supplies, including contraceptives. We also developed the "Global Fund Financing of Condoms and Contraceptive Security" brief, which summarizes publicly available data on the amount of Global Fund financing that has been made available for procuring condoms in recent years; it outlines opportunities to strengthen reproductive health commodity security by using Global Fund financing.

Task Order 1 has made excellent progress against our performance indicators and the new business model. During the past six months, the project has seen an increased emphasis on a longer-term

procurement strategy; an efficient procurement structure; increased development and implementation of new supply chain and policy tools, techniques, and methodologies; and a continued emphasis on the new business model and last mile delivery in-country. See *Task Order 1 Semi-annual Report* for additional details on progress the project has made and documented.

Figure 1. Task Order 1 Commodity Distribution



Task Order 2—Avian Influenza

Following are project achievements during the last six months; shipment totals are summarized in figure 2.

Internal Improvements

During the past six months, TO2 has been working with USAID to respond to the requests of the USAID Office of the Inspector General's audit team. As part of the audit, the project visited the MAP International warehouse in Savannah, Georgia, and the regional distribution center (RDC) in Bangkok, Thailand. The auditors visited the USAID/Indonesia office to examine the project's activities in-country. TO2 responded quickly and thoroughly to all the audit team's requests for information. In addition, the project provided technical assistance to USAID/Indonesia to train their staff on how to use the MIS to access shipment data.

The Logistics Technical Working Group was launched as a way to gather and record staff experiences and findings with regard to the emergency management of AI commodities. The collective lessons learned by staff members are being compiled in a concept paper; TO2 will develop AI specific-tools to guide recipient countries and international partners in managing AI commodities.

The task order conducted a quality assessment of the operations in the MAP International warehouse in Savannah, Georgia. Based on the recommendations of the assessment, the AI Commodity Support Optimization Group (CSOG) was created to improve communications between the task order stakeholders. The group, in addition to improving communications, also works to increase warehouse efficiency; and improve the performance of procurement, warehousing, and delivery.

Outreach

Task Order 2 hired a technical director/field coordinator to allow for proactive engagement of recipient countries regarding their technical assistance needs. The technical director/field coordinator will oversee country-level technical assistance, manage country program workplans, and identify technical assistance opportunities for the task order.

To follow up with priority countries and improve forecast future demand for AI commodities, TO2 created and distributed a stock assessment survey. Data collected from the survey will help the task order to improve forecast future shipments and technical assistance.

Technical Work

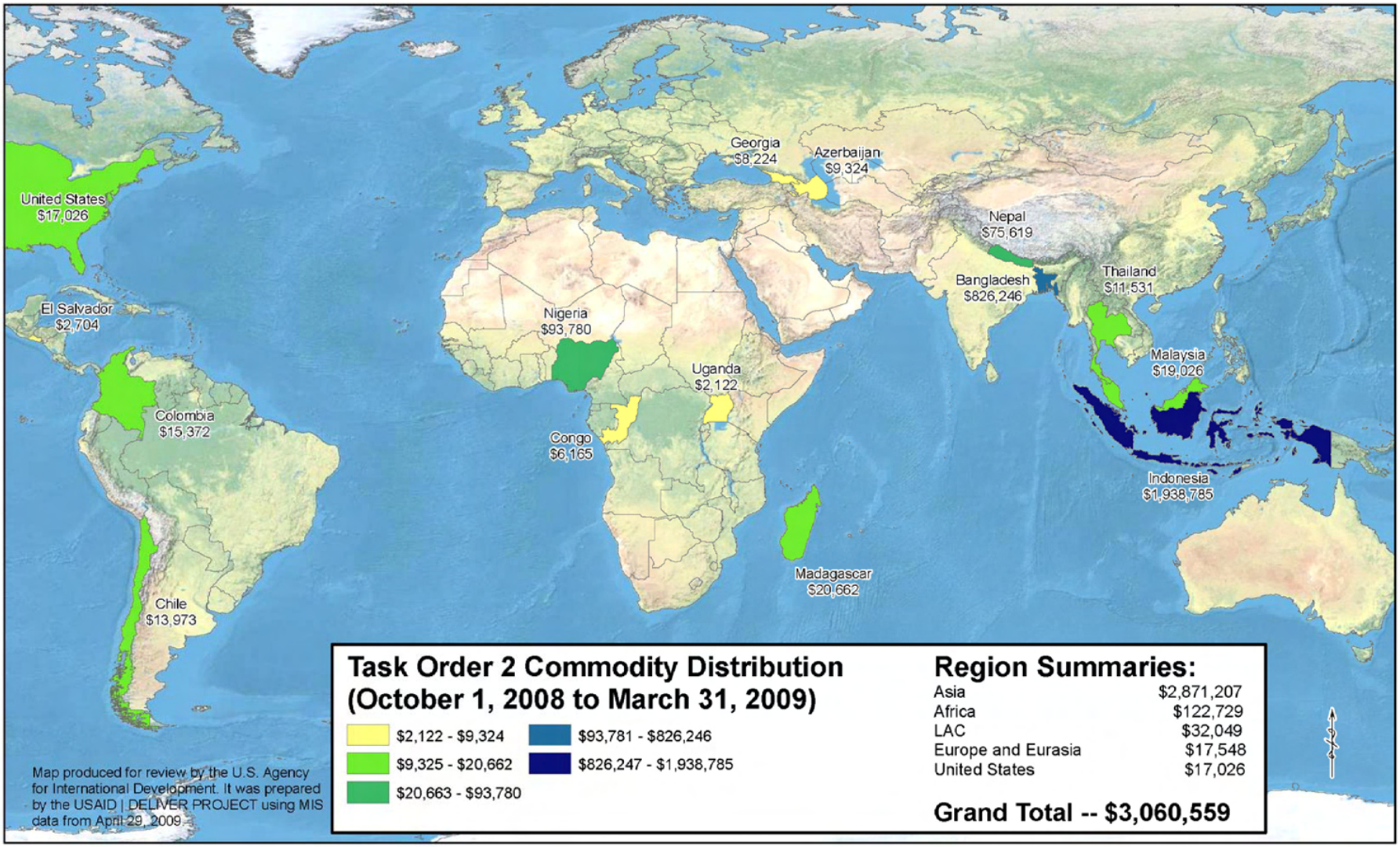
In Nigeria, TO2 worked with the Ministry of Agriculture to develop and implement plans to store and manage AI commodities. As part of this plan, TO2 worked with an organizational strengthening advisor to develop SOPs and training materials, which will be used to train 37 desk officers in Abuja.

To prepare for this year's AI season, TO2 shipped 200 pails of Virkon (a disinfectant effective against AI) to Bangladesh and supported the timely use of the disinfectant in 42 live bird markets in the Dhaka area.

In response to the first outbreak of H5N1 (AI) in Nepal in March 2009, the project worked with the Ministry of Agriculture to provide weekly updates to USAID/Washington on stock levels and distribution of AI commodities.

The task order also worked to develop the in-country workplans for AI programs in Bangladesh, Nepal, and Nigeria.

Figure 2. Task Order 2 Commodity Distribution



Task Order 3—Malaria

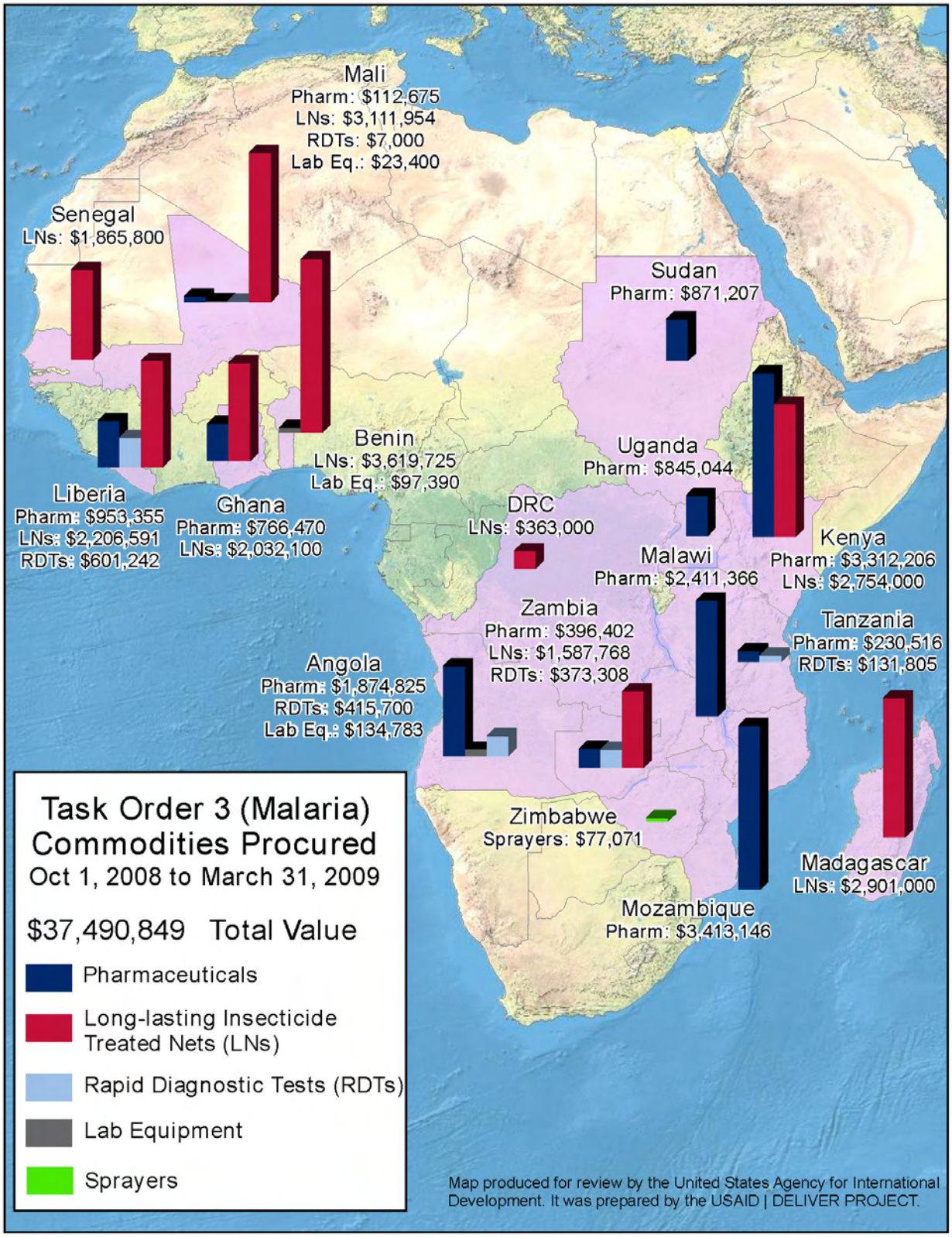
During this reporting period, Task Order 3 continued to scale up its activities; we responded to increased procurement requests, several emergency shipments, and frequent requests for technical assistance; we continued to standardize our operational procedures. The team quickly and efficiently dealt with challenges and successfully responded to the needs of USAID, PMI, and the country teams.

Following are a few of the highlights from the project's support of the President's Malaria Initiative; see figure 3 for a summary of the shipments.

- Procured commodities worth $37,490,849, which represents double the procurement value when compared to the procurement undertaken during the previous 12-month period (FY2008). During the last six months, the projected procured for Angola, Benin, Democratic Republic of the Congo, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Senegal, Sudan, Tanzania, Uganda, Zambia, and Zimbabwe. This included 22,680,905 treatments of malaria pharmaceuticals for 11 countries; 4,052,500 LNs for nine countries; 2,320,000 RDTs for five countries; and various quantities of severe malaria medicines, malaria microscopy kits, and laboratory equipment for four countries.
- In Angola, the project ensured the secure delivery of 1.88 million treatments of Coartem to Angomedica. TO3 acquired the required waivers to land a charter plane, offloading the shipment directly on the delivery trucks, bypassing the ENANA customs warehouse.
- In Benin, the project cleared from port and delivered two consignments (285,000 LNs each) to 35 health zones (subdistricts), each within a week.
- In Mozambique, the project piloted two options for artemether-lumefantrine (AL) distribution in four districts in Zambezia and four districts in Niassa. The analysis of the results of the pilot showed that the AL kit system is the best option. The project will procure the kit materials and transport the materials to each province, where the kits will be prepared for distribution to lower levels.
- In Zambia, the project launched the Malaria/Essential Drugs Logistics System (EDLS) pilot. Two versions of the system are being piloted in selected districts; i.e., Version A (District Health Office (DHO) is holding stock) and Version B (DHO is a cross dock). The project conducted a baseline stock-taking exercise that assessed stock levels at 480 facilities in 28 districts. In addition, the project trained district health offices and hospital and health center staff in the EDLS. In all, 204 participants have been trained in EDLS.
- The project piloted PMI's *End Use Monitoring Tool* in Tanzania. This included adapting the data collection tool, developing a simple database, and reviewing the guidance. Based on the results of the pilot, the tool was revised and shared with SPS to implement in their countries. In addition, the project conducted End Use Monitoring in Zambia, using a tool developed in-country.
- The project's rigorous QA approach identified a potential product quality issue. Initial test data indicated out-of-compliance dissolution results for sulphadoxine-pyrimethamine (SP).
- A laboratory investigation revealed that the failure occurred with some of the testing equipment; the product was re-analyzed and found to meet British Pharmacopeia standards.

- Participated in a number of international malaria meetings to address and improve the global supply of malaria commodities.
- Took a leadership role in initiating the discussion around LN collection, disposal, and recycling.
- Conducted two quarters of reporting on the Procurement Planning and Monitoring Report (malaria) (PPMRm), which provides central-level stock status for PMI focus–countries, including months of stock available and planned shipments by supplier/funding source. The report summarizes and highlights, from the country-level data, countries that are currently stocked out, understocked, or overstocked. It also recommends ways to address critical stock issues. During the first quarter of FY2009, 11 countries reported; in the second quarter, 12 reported.

Figure 3. Task Order 3 Commodity Distribution



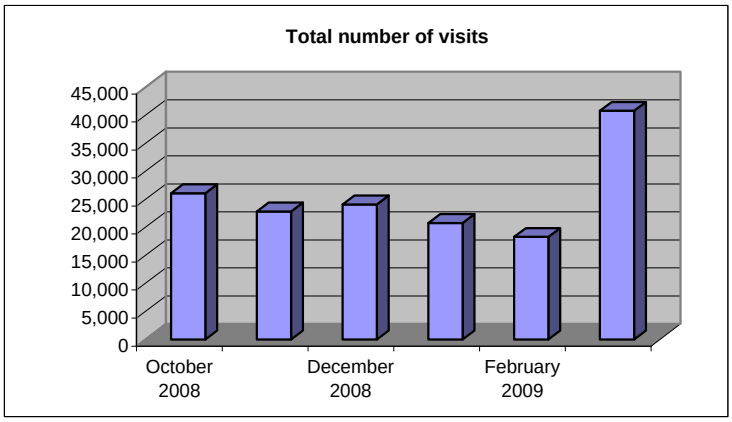
APPENDIX A

MIS PERFORMANCE METRICS REPORT

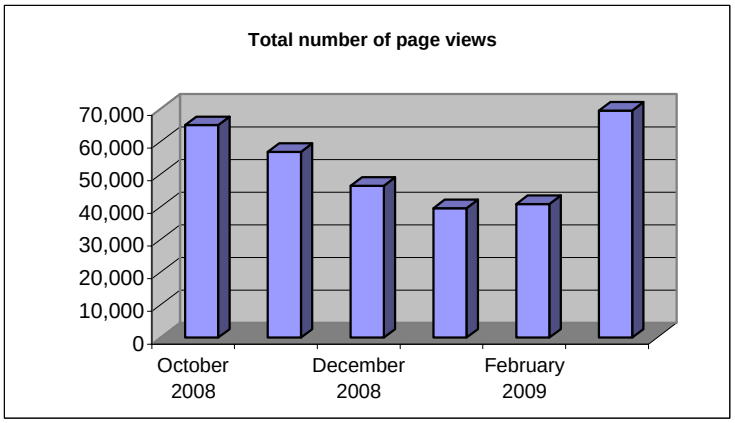
USAID | DELIVER PROJECT
DelPHi Performance Metrics Report
October 2008 - March 2009

Trend Data

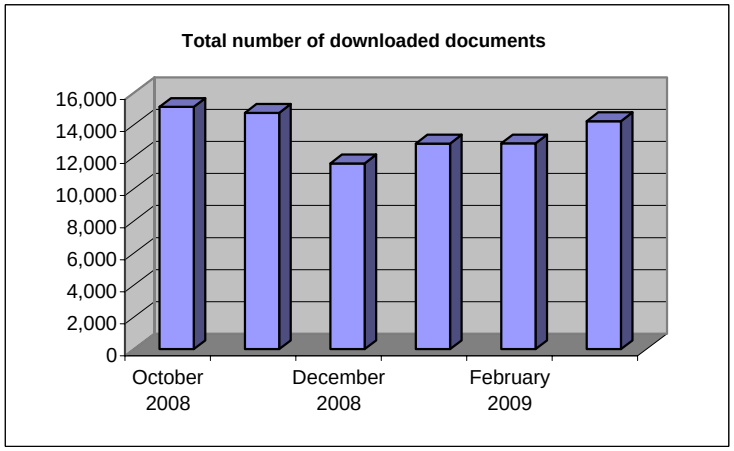
Total number of visits	
October 2008	26,100
November 2008	22,853
December 2008	24,107
January 2009	20,778
February 2009	18,303
March 2009	40,808
Total	152,949



Total number of page views	
October 2008	65,092
November 2008	56,897
December 2008	46,505
January 2009	39,678
February 2009	40,957
March 2009	69,590
Total	318,719



Total number of downloaded	
October 2008	15,120
November 2008	14,757
December 2008	11,602
January 2009	12,839
February 2009	12,841
March 2009	14,231
Total	81,390



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