



Task Order 2, Avian Influenza

FY 2008 Annual Report



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USAID | DELIVER PROJECT, Task Order 2

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Abstract

This report documents the activities of Task Order 2, Avian Influenza during the 2007–2008 fiscal year. Key sections include project management changes, global distribution mechanisms, and managing the global stockpile of avian influenza commodities.

Cover photo: Health workers in Bangladesh demonstrate the use of 3D and SBS kits when responding to outbreaks of avian influenza. The photo was taken September 2008.

USAID | DELIVER PROJECT

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Acronyms

3-D	Depopulation, Decontamination, and Disposal
AED	Academy for Educational Development
AI	avian influenza
AIIS	Avian Influenza International Stockpile
API	Avian and Pandemic Influenza
CAUSA	Crown Agents USA, Inc.
CRZ	contamination reduction zone
CTO	Cognizant Technical Officer
ERP	Enterprise Resource Planning
FAO	Food and Agriculture Organization
FHI	Family Health International
FOH	Federal Occupational Health
ILRI	International Livestock Research Institute
IQC	Indefinite Quantity Contract
JSI	John Snow, Inc.
LMIS	logistics management information system
MAP	Medical Assistance Programs
MIS	management information system
MOA	Ministry of Agriculture
OR	operations research
PDF	portable document format
PMP	performance monitoring plan
PPE	personal protective equipment
QA	quality assurance
R1	first release
RAT	rapid antigen test
RDC	regional distribution center
SBS	Surveillance Biosecurity
SOP	standard operating procedure

SOT	Supply Operations Team
STOP-AI	Stamping Out Pandemic and Avian Influenza
TA	technical assistance
TO	task order
TO2	Task Order 2
UPS SCS	United Parcel Service Supply Chain Solutions, Inc.
USAID	U.S. Agency for International Development
USAID/W	U.S. Agency for International Development/Washington, DC
USDA	U.S. Department of Agriculture
UTM	universal transport medium

Background

The USAID | DELIVER PROJECT, Task Order 2, (Avian Influenza) contract was awarded on March 22, 2007, to support the management of the U.S. Agency for International Development (USAID) Avian Influenza International Stockpile (AIIS) and to distribute avian influenza (AI) commodities to recipient countries throughout the globe. Ensuring the availability of personal protective equipment (PPE), decontamination equipment, and laboratory specimen and testing supplies supports the effective implementation of surveillance and outbreak response activities in countries at risk for and currently experiencing H5N1 outbreaks. Task Order 2 (TO2) was designed to meet the specific challenges of stockpile management and international distribution of the stockpile commodities. In addition to the initial Activity One award, Activity Two was enacted on September 27, 2007, allowing the task order (TO) to conduct further procurement to meet USAID AI priorities. The TO objectives are as follows:

- Establish and operate a secure and reliable global distribution mechanism for current and future USAID AIIS assets.
- Establish a comprehensive management information system (MIS) to provide up-to-date information on the assets managed by the global distribution mechanism.
- Procure, assemble, and distribute additional assets, as required.
- Provide technical assistance (TA) to recipient countries, as required.

Under TO2, the investments will lead to the following results:

- Stocks will be prepositioned in national and regional warehouses worldwide to ensure that national and international authorities will be able to quickly respond to and contain disease outbreaks.
- USAID will be able to:
 - Rapidly distribute additional stockpile commodities to countries when an outbreak occurs.
 - Have access to information on stockpile commodities available in U.S. and regional warehouses; on commodities shipped to and received in individual countries; and on quantities distributed and needed, by country.
 - Have cost-effectively procured additional assets to meet evolving highly pathogenic AI outbreak containment needs
- In-country coordination of the receipt, storage, and distribution of AIIS commodities will have improved.

Project Management

TO2 experienced a significant loss with the death of our director, Steve Wilbur, in February 2008. Under the interim leadership of Acting Director Edward Wilson, the project recruited and successfully filled the position. The Office of Acquisitions and Assistance approved William H. Johnson in this key personnel role in May 2008, and the project is confident in the leadership and vision that he will provide into the future.

In addition to the change in TO leadership, the TO reorganized to accommodate the growing needs. With a greater emphasis on communications products such as the AI Product Catalogue and TO2 Monthly Update, the project created a new half-time position of communications officer. A new program officer was hired, as was a staff associate to support the day-to-day project operations. With the increase in USAID requests to provide more intensive technical support to several countries, the project hired a senior program manager to serve as the TO liaison to Indonesia, Bangladesh, and Nepal, and any other countries that may come up as programmatic priorities for USAID. In addition, the country operations manager position has evolved into a deputy director role, working closely with the director to ensure that TO objectives and priorities are met.

The TO central management team continues to work in close collaboration with each of the Indefinite Quantity Contract (IQC) central units to ensure seamless provision of quality services to our clients. The management team meets weekly with representatives from the supply operations team (SOT), which includes procurement, freight, inventory management, and quality assurance (QA). In addition, the country programs team manages the in-country implementation under the guidance of TO2 staff in countries where more intensive activities are envisioned. Taking advantage of economies of scale, the TO receives financial, communications, and contract management support from the central finance, administration, and communications teams.

Under the leadership of John Snow, Inc. (JSI), project subpartners each contribute to the successful completion of the objectives outlined above. Medical Assistant Programs (MAP) International, a faith-based organization with more than 25 years of experience in warehousing and distribution of donated medical supplies, provides the project with advanced warehousing services. They also manage the day-to-day operations of the USAID AIIS warehouse in Savannah, Georgia. United Parcel Service Supply Chain Solutions, Inc. (UPS SCS), handles all shipping, shipment tracking, and in-country delivery of AIIS commodities, and manages the regional distribution center (RDC) warehouse in Bangkok, Thailand. Family Health International (FHI) supports the project by ensuring that all operations, including warehousing and any assembly of commodity kits, meet international quality standards. Crown Agents USA, Inc. (CAUSA), and PATH provide technical support by participating in procurement and TA activities in select countries. CAUSA can also provide country-level warehousing services where appropriate or necessary. The Manoff Group, Inc., provides strong support for TO2 communications activities and reporting requirements.

The TO management team maintains regular communication with the USAID cognizant technical officer (CTO) via weekly set teleconferences as well as ad hoc meetings on an as-needed basis. This enables the team to respond to the changing environment of the USAID strategy for AI containment and response, and to provide services to support new and evolving programs. USAID

requests for information are met in a timely manner, drawing on inputs from the ORION/MIS, the project's financial management systems, and project records.

In an effort to ensure that potential recipients of USAID AI products have access to accurate information on what products are available from the AIIS as well as what products are available for special order, the project revised the *AI Product Catalogue*. The *AI Product Catalogue* is a portable document format (PDF) document available for download on the USAID | DELIVER PROJECT website. The project also collaborated with the MIS team to ensure that the "My Commodities" webpage provides links to PDF documents detailing the product information for each of the main commodities available in the AIIS.

In addition to the required monthly financial report that is submitted to the USAID CTO, the project has created the *TO2 Monthly Update*, a monthly technical and programmatic update of accomplishments, activities, and issues. This report is made available to USAID and internal project staff across the USAID | DELIVER PROJECT TOs by the 15th of each month. The project performance monitoring plan (PMP) was approved by USAID in August 2008. The PMP, found in Appendix B, outlines deliverables, indicators, and results of the USAID | DELIVER PROJECT's service areas, such as the USAID AIIS global distribution mechanism, MIS monitoring, and procurement activities.

Global Distribution System

Warehousing and Inventory

Over the past year, the project continued to manage the USAID AIIS of PPE, decontamination equipment, and laboratory supplies. These products are ably managed by subpartner MAP International, under the oversight of the JSI SOT. The Savannah, Georgia, warehouse provides 60,000 square feet of well-ventilated space and is equipped with forklifts, shrink-wrap machines, and other equipment to facilitate rapid and efficient packing of orders.

The project conducted an independent physical inventory count in December 2007, which highlighted several areas for tweaking of procedures to streamline and formalize communication of information. As a result, the SOT and MAP teams jointly formalized the communication channels and reporting forms for all inventory adjustments to ensure timely, easily traceable relay of this important data.

Working with subpartner UPS, the project transferred the last of the remaining stockpile commodities from the previous Avian and Pandemic Influenza (API) Preparedness and Response Unit contractor Federal Occupational Health (FOH). The products were received into inventory to be managed by the USAID | DELIVER PROJECT on April 2, 2008. These remaining items received from FOH include Virkon and RelyOn disinfectant, respirator fit test kits, germicidal wipes, five-gallon buckets, one-gallon sprayers, three-gallon sprayers, inflatable children's pools, latex gloves, scrub brushes, disposable instant cold compresses, bio kits, protective suits, goggles, respirator masks, prosthetic materials, a sump pump, a battery-operated carton lift, a free standing air conditioner, and two plastic containers.

The TO2 management team worked closely with the IQC SOT, the central service unit that provides all inventory management and procurement services for the TOs under the IQC, to streamline order management systems and processes. This collaboration produced revised and strengthened standard operating procedures (SOPs), reducing redundancy and maximizing effectiveness. The TO2 management team retains responsibility for all communications and relationships with clients in USAID missions and field partners, as well as with USAID/Washington, DC (USAID/W). The SOT ensures that all inventory management functions are consistent with industry best practice and professional standards, working closely with the TO2 warehouse.

Regional Distribution Center

The project opened its flagship RDC in Bangkok, Thailand, in March 2008. The Bangkok RDC is operated by project subpartner UPS, in close collaboration with the SOT. The location of the RDC in Asia will allow for rapid deployment of PPE, decontamination equipment, and laboratory specimen collection kits to at-risk countries in the region. This region is the hardest hit by the H5N1 AI virus, and the close proximity of the RDC will facilitate 24- to 48-hour turnaround time on any emergency orders and one-week turnaround time for any standard orders received.

Prior to the opening of the RDC, the project sent two advisors, warehousing expert Jim Eberle and inventory management specialist Suzanne Veit, to Bangkok to assess the proposed UPS warehouse and to review processes for managing orders under the project. This December 2007 visit served to establish a good working relationship and the essential communication channels between the UPS warehouse management team and the SOT.

The project prepositioned 45,000 PPE kits, 400 decontamination kits, and 10 laboratory kits in the Bangkok warehouse. Since the RDC opened, the project has shipped PPE, decontamination kits, and laboratory kits to Bangladesh for a value of \$134,467. This shipment demonstrated a cost savings of \$52,000, which represents the operating costs for the RDC for more than seven months.

Freight Forwarding

Over the past year, the project managed 110 shipments to 65 countries with a total value of \$3,538,591. The average response time for standard air shipments from receipt of order to arrival of the products in the destination country was 13 days.

The project worked closely with USAID to update the prepositioning shipment schedule. This helped to ensure that USAID priority countries receive AI prevention and response commodities based on an ongoing assessment of the epidemiological profile of the virus. In addition to the “standard” airfreight shipment of 4,500 PPE, 40 decontamination kits, and 1 laboratory kit, several countries, including Indonesia, Egypt, and Nigeria, received larger consignments to meet higher demand. These shipments of two or more container loads were shipped by ocean. The establishment of the RDC facilitated a more nimble operation, improving the capacity of the project to quickly respond to any emergency in the highly affected Asia region.

In order to monitor the competitiveness of the freight rates provided to the project by our subpartner UPS, the TO implemented a strategic freight rate review. An independent third party group has been tapped to provide comparative rates for select shipments, and the project reviews their analysis on a quarterly basis. To date, the rates provided by UPS have been consistent with the market, as well as highly competitive.

Procurement

In September 2007, Activity Two went into effect, allowing for the procurement of commodities to replenish AIIS items, as well as other commodities requested by USAID to support AI preparedness and response activities. Building on the recommendations of the AI Commodity Review held in September 2007, the project procured the items necessary to create 100 revised laboratory kits.

The project procurement specialist established an innovative relationship with the vendors for the rapid antigen test (RAT) kits and viral transport medium. Per a special arrangement with these vendors, these items are managed separately to maximize the shelf life for recipients and to avoid expiry and wastage. This arrangement saved USAID from the costs associated with expired products and managing their disposal.

Based on the outcomes of the September 2007 AI Commodity Review and the follow-up Decontamination Kit Review, the project procured the items for the newly developed Depopulation, Decontamination, and Disposal (3-D) kits and the Surveillance Biosecurity (SBS) kits. According to the recommendations of those two expert panels, the project procured component items to create 10 prototypes of each kit for a September 2008 field test. Once the field test is

complete and the utility of the kits is demonstrated in the field, USAID has indicated that the project should be prepared to procure 500 of each kit in the next year.

Over the past year, the project has worked closely with counterparts in Indonesia, including the International Livestock Research Institute (ILRI), Food and Agriculture Organization (FAO), and USAID/Jakarta, to develop technical specifications and a procurement plan for poultry vaccine to support the Indonesia poultry vaccination operations research (OR) activity. This activity involves procurement of H5N1 influenza vaccine and Newcastle Disease vaccine, as well as ancillary equipment such as automatic syringes, needles, and incinerators, for a total value of \$878,580. This highly complex procurement operation required intensive collaboration with partners in the field, as well as development of innovative relationships with vendors based in Indonesia and internationally, coordinating delivery of a wide variety of products to ensure availability for the various rounds of the OR vaccination campaigns. See Appendix A for a diagram illustrating the web of partners and vendors that the project managed to support the OR campaign in Indonesia.

Stockpile Management

Disassembly of Decontamination Kits

Based on the results of the September 2007 Commodity Review, the project received approval from USAID in July 2008 to disassemble the remaining 8,504 decontamination kits into their component items. This disassembly process yielded items that were damaged or expired, as well as many items which were usable. The project completed this massive activity while continuing to provide inventory management and shipment processing services to ensure no disruption of services to USAID and country recipients.

On completion of the de-kitting process, the usable items were brought into inventory as individual items, and the expired or damaged goods were placed in quarantine. The project prepared detailed spreadsheets with information on items recovered and quantities for USAID review. The project then worked with USAID to develop a strategy for disposal of the unusable or expired items, and donation of other items, such as the inflatable pools, that were deemed usable for purposes outside the scope of the project.

Decontamination Kit Review

In September 2007, USAID convened experts from a wide variety of U.S. Government agencies to conduct a technical review of the contents of the kits in the AIIS. The expert review panel identified several major deficiencies specific to the decontamination kit, including culturally and/or technically inappropriate items, in addition to the lack of clear guidance to the field on how to deploy the kits.

In response to the recommendations of the initial Commodity Review, in April 2008, the project convened a second expert panel of biohazard response experts to analyze the decontamination kits in-depth to ensure that the contents were appropriate for responding to and containing an AI outbreak. These experts brought a range of experience to the discussion and the panel included experts on outbreak response from the U.S. Department of Agriculture (USDA), biohazard response experts from leading environmental management companies with extensive field experience in livestock outbreak management, occupational health and safety experts, and veterinary health experts from the Stamping Out Pandemic and Avian Influenza (STOP-AI) project.

As a result of the panel's recommendations, the project created two kits to replace the original decontamination kit. The revised kits provide the appropriate equipment to implement protocols set by the FAO for poultry outbreak management, as well as biohazard response SOPs. The 3-D kit provides initial support for the activities in the infected area, primarily the depopulation of birds; decontamination of the infected premise, equipment, and personnel; and the disposal of carcasses, contaminated materials, and equipment. The SBS kit supports the active surveillance activities undertaken within the 10-km perimeter. More than 60 percent of the materials in the current AIIS decontamination kit could be salvaged and used in the new kits.

Based on the specifications outlined by the expert panel, the project procured prototypes of the 3-D kit and SBS kit, which were field tested in Bangladesh in September 2008. TO2 provided the biohazard response expertise to team up with STOP-AI's veterinary health expert and Academy for

Educational Development (AED) communications experts to implement the field test with counterparts from the Bangladesh Department of Livestock Services. Another opportunity for field testing and demonstration of the utility of the kits in the domestic as well as international context has been identified in a USDA domestic simulation set for October 2008. Along with the prototypes, the project collaborated with these biohazard response experts to develop detailed instructions and training materials to be inserted in each kit to aid end users in using the kits. These instructions were also field-tested in Bangladesh and will be finalized in October 2008.

In the next project year, based on the results of the field test, the project will work closely with USAID to develop a forecast and procurement strategy for the required quantities of both kits based on likely future outbreak patterns and containment activities in-country. Once this procurement strategy is established, the project will work with USAID in the coming months to develop an approach to kitting the products that will ensure maximum flexibility and potential customization of kits (language of instructions, for example), while maintaining a standard number of preassembled complete kits on hand.

Diagnostic Commodity Review

Over the past two years, the capacity of recipient countries to collect and transport samples has increased dramatically. The virus has become endemic in some countries; in other countries, outbreaks have decreased. In response to the dynamic nature of the disease, and to ensure that the commodities are coordinated with comprehensive AI preparedness and response plans, USAID proposed updating the approach to distributing the AIIS diagnostic support equipment in AI outbreak response and surveillance.

The USAID | DELIVER PROJECT hosted a meeting on August 8, 2008, to discuss the stockpiling and distribution strategy for the RAT kits and diagnostic equipment, including laboratory specimen collection kits. This was an opportunity for USAID to review the role of the laboratory specimen collection kits and the other diagnostic-related products supplied through the AIIS to the recipient countries. The meeting revised the USAID overall diagnostic commodity strategy in light of the changing nature of the AI disease patterns and the capacity of local countries to respond to outbreaks and endemic situations.

As a result of the meeting, which included veterinary health experts from STOP-AI project and procurement and commodity management experts from the USAID | DELIVER PROJECT, the USAID API Unit decided to implement several changes in the distribution strategy for the diagnostic commodities of the AIIS. USAID outlined a plan for distribution of the current stock on hand of the laboratory kits and discontinuing future distribution of these kits. The project will distribute, to identified recipients, the remaining RAT kits in stock. Several diagnostic products, such as RAT, the universal transport medium (UTM), and infectious substance shippers, will remain in the project's *AI Product Catalogue* in the "Special Order Commodities" section. Countries will be able to order RAT and UTM through their annual operations plans, using their own funds.

Support to USAID Decontamination Strategy

In July 2008, the USAID API Unit held a meeting of partners including the USAID | DELIVER PROJECT, STOP-AI project, and AED to announce a new strategy designed to arrest the spread of the H5N1 virus in highly endemic countries. The strategy focused on wet market decontamination as a nexus of virus spread, and the effort targeted wet markets for an intensive proactive cleaning and decontamination campaign throughout the late summer and early fall of 2008. To support this strategy, the project will ship AIIS stockpile Virkon disinfectant and procure additional Virkon, pressure washers, detergent, and high-powered sprayers for Indonesia, Bangladesh, Egypt, and Pakistan. As of the end of this reporting period, the project stands ready to receive orders for these items and will manage procurement and shipment accordingly.

Technical Assistance

Orientation for Overseas Logistics Advisors

The project has provided TA to USAID Missions, U.S. embassies, local AI counterparts, as well as international partner institutions in the area of logistics management for AI supplies. Although not initially envisioned as a major part of the project's scope of work, with increased requests from USAID, TA has become more prominent in the overall TO activities. To meet the need for assistance, the project identified 44 logistics advisors from JSI, PATH, CAUSA, FUEL, MAP International, and UPS. They are based in strategic locations throughout the world and can provide the required rapid response support.

To prepare these logistics advisors to provide assistance in the area of AI, the project conducted an orientation session in September 2007 in Arlington, Virginia, for U.S.-based logistics advisors; the project held a second orientation in October 2007 in Bangkok, Thailand, for internationally-based advisors. Specific objectives were to train the group on the management of the specific stockpile commodities and provide an orientation on the issues of coordination and collaboration among the various actors in the AI arena.

Indonesia

Former TO Director Steve Wilbur conducted initial meetings with USAID/Jakarta in October 2007 to determine how the project could support the rollout of the proposed ILRI/FAO/Ministry of Agriculture (MOA) operations research activity, specifically the procurement and distribution of H5N1 influenza vaccine, Newcastle Disease vaccine, ancillary vaccination equipment, and cold chain equipment. Subsequent TA visits evaluated the existing cold chain infrastructure in the agriculture structure in OR districts and made system improvement recommendations to achieve adequate cold chain capacity for the upcoming OR campaign, ensuring that USAID-funded vaccines would be safely handled. Further management visits served to discuss with the USAID Mission the details of project support to the OR activity, further refine the list of items for procurement, and ensure adequate management support for this complex activity. The workplan for the activity in Indonesia was completed in April, and the local office opened in May.

The project assisted the OR program via procurement of a wide variety of items and through extensive TA by Jim Eberle to set up distribution and inventory management systems for the OR activity. Procurement began in March 2008, with delivery to meet the start of the OR activity in June. Throughout the distribution of the procured items, the project maintained close collaboration with all partners in Indonesia and USAID/W, and provided extensive technical support to the process. The workplan also called on the project to support the Government of Indonesia in its pandemic preparedness planning via TA to the National Committee for AI Control and Pandemic Influenza Preparedness to develop a distribution strategy for 10,000 PPE, which USAID donated to the committee.

Egypt

Beginning in October 2007, the project provided technical support to Egypt to assist with strategic planning for AI commodities. The multipartner team included participants from USAID/W, CAUSA, and MAP International, and tapped the local office of UPS SCS as well. The assistance supported the development of SOPs for the importation of AI commodities donated by USAID, detailing the roles and responsibilities of all local and international partners. During the TA visit, the team implemented these SOPs for a standard airfreight shipment. Based on the success of this shipment and the established SOPs, plans were developed for future shipments of PPE and decontamination equipment. A follow-up visit was conducted to focus specifically on operations and inventory management systems at the central and governorate levels. The team shared recommendations for warehouse improvements with USAID/W and the mission for further action.

Nigeria

In preparation for a large ocean shipment of PPE to Nigeria, the project provided technical support to the Nigerian Ministry of Agriculture in September 2007 to ensure readiness to receive the consignment. After assessing multiple storage options for the PPE stockpile, the project engaged the services of a vendor to make repairs to the central MOA warehouse in Kaduna. These repairs were completed in November 2007, in time for the arrival of the PPE in February 2008. To support monitoring of the consumption of the PPE, the project provided partner STOP-AI with ordering and reporting form templates.

Anticipating the need to resupply the states in the context of an unpredictable virus pattern, USAID/Nigeria identified logistics management as a significant issue to be addressed. In September 2008, the project prepared to conduct a TA visit to assess the current distribution system for AI commodities and develop recommendations for system improvement.

Bangladesh

In July and August 2008, the project conducted an assessment of selected district and upazila warehouses in Bangladesh in preparation for the development of a workplan. The workplan will focus on improving warehousing, inventory control, and logistics management information system (LMIS) for the AI program managed by the Department of Livestock Services. In September 2008, in-country staff and a technical expert provided support for a visit by a USAID/W intern who focused on assessing the current AI commodities stocks and testing a forecasting tool for estimating immediate and medium-term AI commodity needs.

Management Information System

The new USAID | DELIVER PROJECT MIS improves the visibility, access, and use of information along the supply chain, which is a fundamental approach for the project. The project MIS has undergone substantial development over the past year, representing an increase in the quality of services provided and timely availability of data for decision making. TO2 attends the regular MIS Steering Committee Meetings, keeping abreast of upcoming activities and providing TO specific feedback to MIS functionality and priorities. Participation in the Steering Committee allows TO management to monitor implementation of system improvements and bug fixes.

The system consists of the following major building blocks:

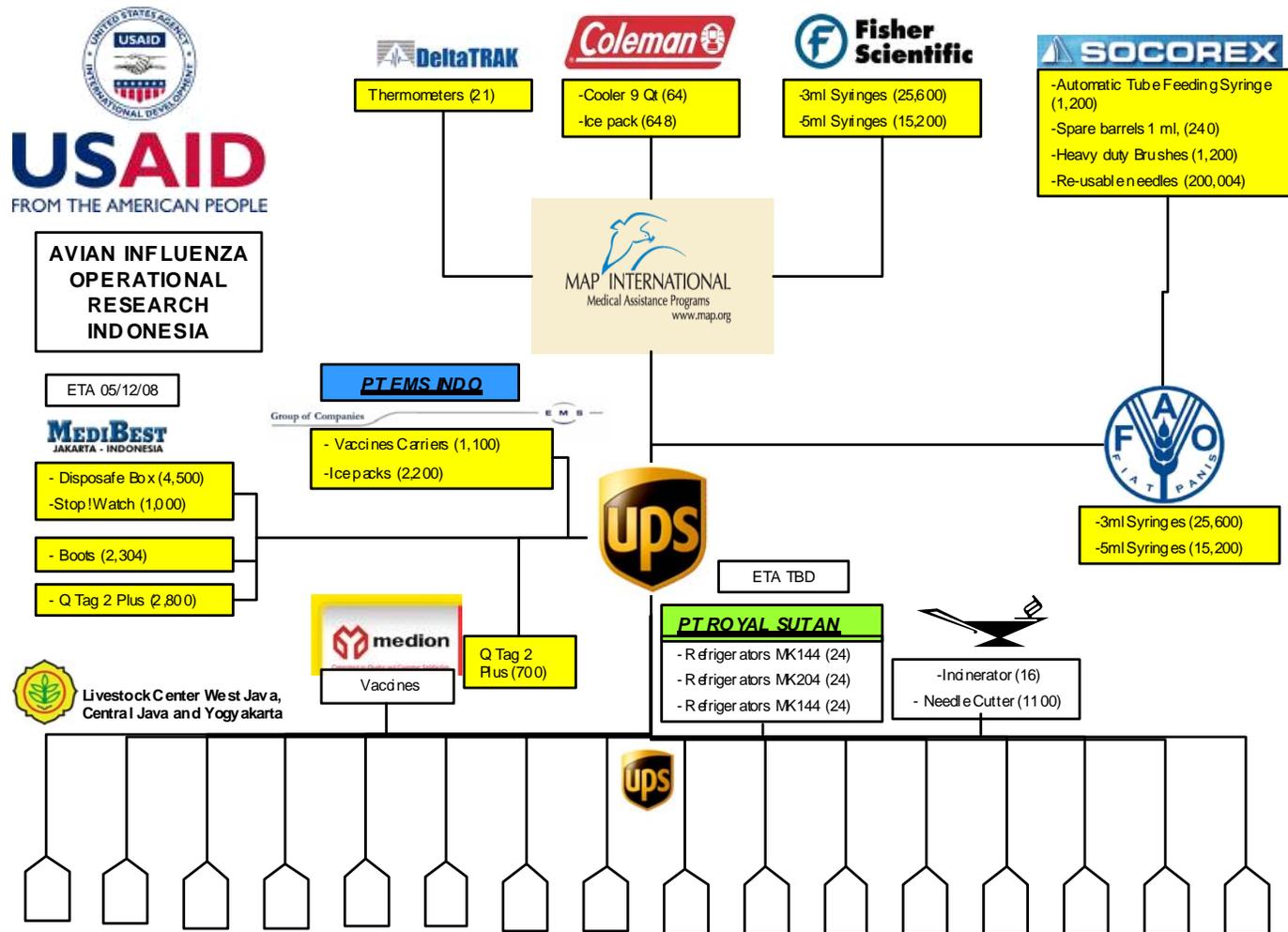
- By far the largest component, the ORION Enterprise Resource Planning (ERP) system from 3i InfoTech is the foundation of the supply chain management system; it stores procurement and shipping data and is the essential tool box for the SOT to collect, process, and distribute data related to the supply chain, including in-country delivery to the port or central warehouse.
- The new website and web-based reporting system (<http://deliver.jsi.com>) provide access to real-time information about shipments of health supplies; information about the commodity security status of USAID-supported countries; reference materials on commodity security and logistics; as well as an intranet with a wealth of resources, tools, and templates used by project staff every day. The permission-based structure serves various audiences, including USAID/W Missions, project and procurement staff, recipients, affiliates, and the general public.

As originally envisioned, the new system serves all users from around the globe, as well as those in Washington, DC, through a single, easy to use, web-based platform that was built on the foundation of an industry-standard ERP. The MIS has become the project's one-stop shop for monitoring shipments and managing procurement.

On April 14, 2008, after a two-week data conversion period, the new MIS, including the website and reporting system, were deployed. After Release 2.1 was completed, ORION could track kitting operations; this functionality manages the assembly of laboratory kits. TO2 legacy data (an Access database with 2006 and 2007 shipments data) was converted into a spreadsheet for more manageable reporting by country, commodity, and commodity value. This historical data, dating from before TO2 started, was prepared for loading into the data warehouse soon after Release 3.0 went live. However, because certain data points could not be obtained from the previous vendor, the project was canceled. The data is still available to TO2 off-line. ORION continues to process TO2 orders. During the past year, TO2 provided more than \$4.8 million dollars worth of commodities to 64 countries.

Appendices

Appendix A: Partners and Vendors Supporting Operations Research in Indonesia



Each district will receive 4 Cooler, 40 Ice pack, 1 Thermometer, 60 Stop Watch, 70 Disposable Boxes, 68 Vaccine Carriers, 136 Icepacks, 1 incinerator, 68 needle cutter, 144 pairs of boots, 4 refrigerators, 75 Automatic Syringes, 75 Brushes, 15 Spare Barrels, 2,244 Needles

Appendix B: Performance Monitoring Plan

Deliverables	Indicators	Source	Frequency	Result
Objective 1: Establish and operate a secure and reliable global distribution mechanism to store, transport, and rapidly deliver current and future USAID AIIS assets				
Take control and re-process existing AI stockpiled inventory	Stockpile of current commodities successfully moved from warehouse in Atlanta, Georgia, to MAP warehouse in Savannah, Georgia	Atlanta audit report; MAP certificate of receipt of goods	Once	Completed April 2, 2008
	QA review of the stockpile from Atlanta	FHI report	Once	Completed during previous reporting period (June 2007)
	Pallets from Atlanta warehouse re-packed to meet international shipping requirements	Annual Report	Once	Completed during previous reporting period.
	Decontamination kits reviewed and re-assembled	Annual Report	Once	Completed during previous reporting period
Manage existing and future USAID AIIS and procurement of new kit components	Annual independent inventory audit of MAP warehouse crosschecked and reconciled with the project database	ORION	Annual	Completed December 2007
	Timely shipment of vendor orders (supplier fill rate)	ORION	Bimonthly	Including outliers resulting from complications with Indonesia H5N1 vaccination OR, 63% of vendor orders were shipped on time. Excluding these outliers, 74% were shipped on time
	New kits assembled as requested	ORION	As requested	Ongoing/Current
	SOPs developed for disposal of damaged and/or expired products	Project documents	Ongoing	Developed June 2008
	100% documentation of product disposal according to the SOP and U.S. Government guidelines	Certificate of Disposal	As required	Ongoing/Current

	Inventory and shipment quantity and value available to USAID	ORION/MIS	As needed	All data available through http://deliver.jsi.com
Provide international freight forwarding as necessary to routinely distribute existing and future USAID AIIS	Emergency orders delivered to port no later than two days after desired receipt date (i.e., under nine days from date of receipt of approved order)	ORION	Quarterly	100% of emergency orders delivered to port on time
	Standard air orders delivered to port within 7 days of desired receipt date (i.e., under 21 days from date of receipt of approved order)			88% of standard air orders delivered to port on time
	Sea freight orders delivered to port within four weeks of desired receipt date			100% of sea freight orders delivered to port on time.
Establish regional distribution centers and provide warehousing and/or temporary storage facilities as requested	Cost-benefit analysis of RDCs	Ad hoc studies	To be determined	Shipment from Bangkok RDC demonstrated \$52,000 cost savings
	On-time shipping performance	ORION	Quarterly	100%
	Annual independent inventory audit of RDC warehouse crosschecked and reconciled with the project database	ORION	Annual	To take place starting next reporting period
Provide timely and effective response to scopes of work for TA	Percentage of short-term technical assistance requests fulfilled within one month of requested date	Project documents	Annual	100%
Implement a QA program for supplies and processes	QA program to verify supplies meet contractual and product specifications implemented	Work plans, SOPs, FHI reports	By contract	To be developed during next reporting period
	QA program for warehouse and inventory management processes implemented	Work plans, SOPs, FHI reports	By contract	To be developed during next reporting period
Objective 2. Establish a comprehensive MIS to provide current information about all aspects of the AI global distribution mechanism from procurement to delivery				
Availability of the first release (R1) of the ORION MIS	All procurements and shipments managed using ORION R1	Management reports	Once	From June 2007
Availability of the second release of the ORION MIS	Kitting module available	Management reports	Once	From January 2008
Availability of the third release of the MIS	Web-based inventory and shipment reporting available	MIS	Once	From April 15, 2008

Objective 3. Procure, assemble, and distribute additional assets as needed				
	Bimonthly SOT scorecard review	ORION	Bimonthly	To be implemented starting next reporting period
Procure additional USAID AI commodities	Cost-effective implementation of procurement requests	Project documents	As needed	Ongoing: (1) Negotiation memo for procurement requiring Office of Acquisition and Assistance approval; (2) competitive quotes; (3) sole source justification
Manage and distribute additional assets as needed	Warehouse managing and AIIIS distribution indicators described above	As appropriate	As needed	Same as Objective 1

Appendix C: Shipment Quantities and Values

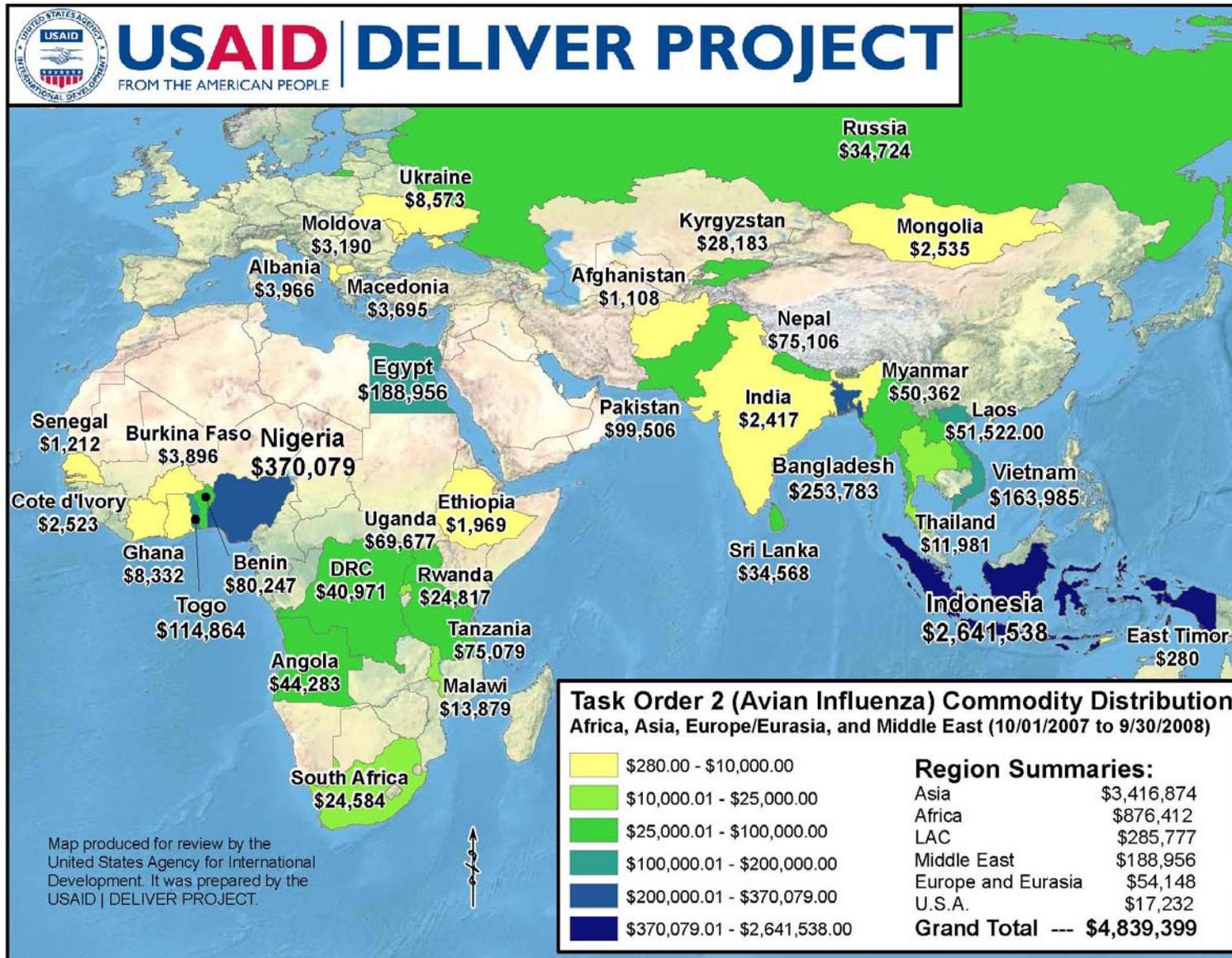
TO2 Shipment Quantities and Values, October 2007 to September 2008

	AI Animal Rapid Diagnostic Test		AI Decontamination		AI Laboratory Kit		AI Miscellaneous		AI Universal Viral Transport Media Combo Kite		Disinfectant		OR PPE		
Country	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Total Value
Afghanistan	2	\$501	0	\$0	0	\$0	N/A	\$0	1	\$94	0	\$0	75	\$1,097	\$1,692
Albania	1	\$215	2	\$1,004	2	\$1,693	N/A	\$346	1	\$81	0	\$0	50	\$627	\$3,966
Angola	4	\$850	20	\$10,876	2	\$1,835	N/A	\$0	2	\$135	0	\$0	2,250	\$30,587	\$44,283
Anguilla	1	\$243	1	\$566	1	\$955	N/A	\$0	1	\$91	0	\$0	450	\$6,370	\$8,225
Antigua and Barbuda	1	\$150	1	\$350	1	\$590	N/A	\$0	1	\$56	0	\$0	450	\$3,938	\$5,084
Aruba	1	\$185	1	\$431	1	\$727	N/A	\$0	0	\$0	0	\$0	450	\$4,848	\$6,191
Bahamas	0	\$0	5	\$2,287	1	\$772	N/A	\$0	0	\$0	0	\$0	450	\$5,146	\$8,205
Bangladesh	86	\$13,377	211	\$90,168	1	\$717	N/A	\$104	0	\$0	200	\$46,008	9,175	\$104,224	\$254,598
Barbados	1	\$203	1	\$474	1	\$800	N/A	\$0	1	\$77	0	\$0	450	\$5,335	\$6,889
Belize	1	\$180	1	\$420	1	\$709	N/A	\$0	1	\$68	0	\$0	450	\$4,730	\$6,107
Benin	25	\$3,884	15	\$8,984	0	\$0	N/A	\$0	0	\$0	0	\$0	4,500	\$67,379	\$80,247
Bermuda	1	\$204	1	\$477	1	\$804	N/A	\$0	1	\$77	0	\$0	450	\$5,361	\$6,923
Burkina Faso	25	\$3,896	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	0	\$0	\$3,896
Cayman Islands	1	\$164	1	\$381	1	\$644	N/A	\$0	1	\$62	0	\$0	450	\$4,292	\$5,543
Congo, Dem. Rep.	0	\$0	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	4,500	\$79,059	\$79,059
Costa Rica	1	\$180	1	\$419	1	\$707	N/A	\$0	0	\$0	0	\$0	1,500	\$15,723	\$17,029
Côte D'Ivoire	0	\$0	0	\$0	0	\$0	N/A	\$0	25	\$2,523	0	\$0	0	\$0	\$2,523

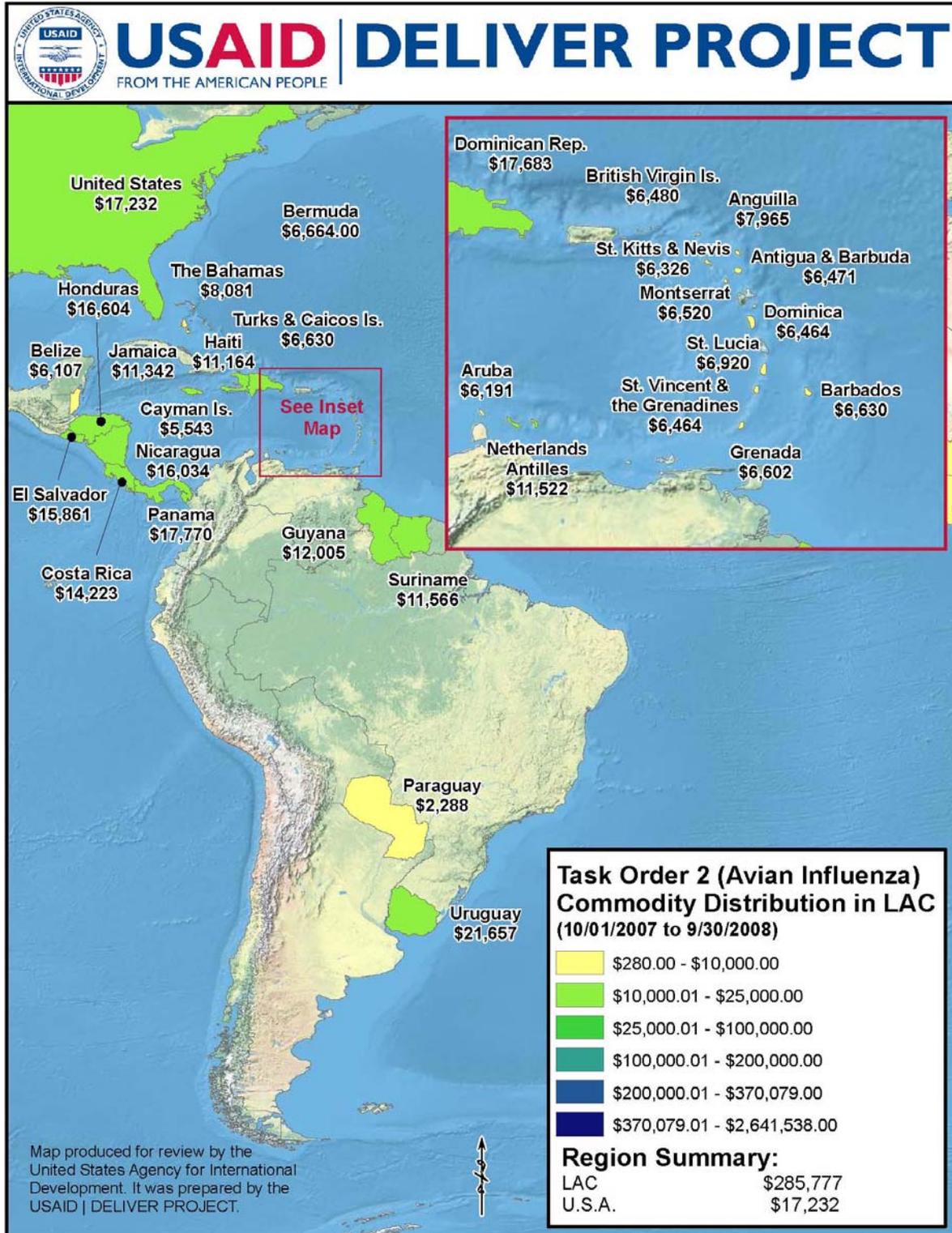
Dominica	1	\$191	1	\$445	1	\$751	N/A	\$0	1	\$72	0	\$0	450	\$5,005	\$6,464
Dominican Republic	2	\$350	2	\$816	2	\$1,376	N/A	\$0	0	\$0	0	\$0	1,500	\$15,290	\$17,832
East Timor	2	\$280	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	0	\$0	\$280
Egypt	0	\$0	80	\$36,076	1	\$1,574	N/A	\$0	0	\$0	0	\$0	13,500	\$151,453	\$189,103
El Salvador	1	\$167	1	\$391	1	\$659	N/A	\$0	0	\$0	0	\$0	1,500	\$14,644	\$15,861
Ethiopia	1	\$221	0	\$0	1	\$872	N/A	\$0	1	\$83	0	\$0	50	\$646	\$1,822
Ghana	4	\$884	4	\$2,062	4	\$3,480	N/A	\$284	4	\$333	0	\$0	100	\$1,289	\$8,332
Grenada	1	\$202	1	\$472	1	\$797	N/A	\$0	1	\$76	0	\$0	450	\$5,314	\$6,861
Guyana	1	\$195	1	\$455	1	\$767	N/A	\$0	1	\$73	0	\$0	925	\$10,515	\$12,005
Haiti	1	\$187	1	\$436	1	\$735	N/A	\$0	0	\$0	0	\$0	900	\$9,806	\$11,164
Honduras	1	\$174	1	\$406	1	\$685	N/A	\$0	0	\$0	0	\$0	1,500	\$15,236	\$16,501
India	0	\$0	0	\$0	0	\$0	N/A	\$2,417	0	\$0	0	\$0	0	\$0	\$2,417
Indonesia	0	\$0	960	\$347,176	0	\$0	N/A	\$878,579	6	\$339	500	\$27,606	0	\$0	\$1,253,700
Jamaica	1	\$180	1	\$420	1	\$709	N/A	\$0	0	\$0	0	\$0	925	\$9,722	\$11,031
Kyrgyzstan	11	\$2,365	11	\$5,518	11	\$9,309	N/A	\$69	11	\$890	0	\$0	800	\$10,032	\$28,183
Laos	0	\$0	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	4,500	\$51,633	\$51,633
Macedonia	1	\$202	2	\$943	2	\$1,590	N/A	\$0	1	\$76	0	\$0	75	\$884	\$3,695
Malawi	0	\$0	2	\$962	1	\$812	N/A	\$0	1	\$78	0	\$0	1,000	\$12,027	\$13,879
Moldova	3	\$575	0	\$0	3	\$2,265	N/A	\$185	3	\$217	0	\$0	0	\$0	\$3,242
Mongolia	1	\$240	1	\$560	1	\$945	N/A	\$0	1	\$90	0	\$0	50	\$700	\$2,535
Montserrat	1	\$192	1	\$449	1	\$757	N/A	\$0	1	\$72	0	\$0	450	\$5,050	\$6,520
Myanmar	0	\$0	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	4,500	\$50,362	\$50,362
Nepal	25	\$4,930	40	\$18,407	0	\$0	N/A	\$0	0	\$0	0	\$0	4,500	\$51,769	\$75,106
Netherlands Antilles	1	\$187	1	\$436	1	\$736	N/A	\$0	1	\$70	0	\$0	925	\$10,093	\$11,522
Nicaragua	1	\$169	1	\$395	1	\$666	N/A	\$0	0	\$0	0	\$0	1,500	\$14,804	\$16,034
Nigeria	15	\$2,100	190	\$94,836	12	\$7,756	N/A	\$1,055	10	\$565	60	\$17,969	30,000	\$287,333	\$411,614
Pakistan	2	\$373	40	\$18,652	1	\$1,199	N/A	\$0	2	\$150	0	\$0	7,000	\$79,268	\$99,642
Panama	1	\$174	1	\$407	1	\$686	N/A	\$0	0	\$0	0	\$0	1,500	\$15,248	\$16,515
Paraguay	0	\$0	2	\$1,181	0	\$0	N/A	\$0	0	\$0	0	\$0	75	\$1,107	\$2,288
Russian Federation	0	\$0	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	3,000	\$39,185	\$39,185
Rwanda	0	\$0	8	\$5,086	2	\$1,715	N/A	\$1,803	2	\$164	0	\$0	1,150	\$16,049	\$24,817
Saint Kitts Anguilla	1	\$189	1	\$440	1	\$743	N/A	\$0	0	\$0	0	\$0	450	\$4,954	\$6,326
Saint Lucia	1	\$212	1	\$494	1	\$834	N/A	\$0	1	\$80	0	\$0	450	\$5,561	\$7,181

Saint Vincent	1	\$191	1	\$445	1	\$751	N/A	\$0	1	\$72	0	\$0	450	\$5,005	\$6,464
Senegal	1	\$294	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	50	\$918	\$1,212
South Africa	0	\$0	10	\$4,661	10	\$7,864	N/A	\$1,605	20	\$1,714	0	\$0	750	\$8,740	\$24,584
Sri Lanka	38	\$5,832	16	\$7,208	1	\$760	N/A	\$496	0	\$0	0	\$0	1,800	\$20,272	\$34,568
Suriname	1	\$188	1	\$438	1	\$739	N/A	\$0	1	\$71	0	\$0	925	\$10,130	\$11,566
Tanzania	1	\$233	40	\$18,665	2	\$2,518	N/A	\$0	1	\$88	0	\$0	4,550	\$53,176	\$74,680
Thailand	0	\$0	9	\$4,261	0	\$0	N/A	\$0	0	\$0	10	\$1,802	500	\$5,918	\$11,981
Togo	0	\$0	44	\$25,601	0	\$0	N/A	\$0	0	\$0	44	\$15,361	5,000	\$72,851	\$113,813
Turks and Caicos Isl.	1	\$196	1	\$456	1	\$770	N/A	\$0	1	\$74	0	\$0	450	\$5,134	\$6,630
Uganda	0	\$0	11	\$5,887	1	\$1,920	N/A	\$1,528	0	\$0	0	\$0	4,550	\$60,713	\$70,048
Ukraine	6	\$1,478	2	\$1,437	4	\$4,122	N/A	\$366	4	\$394	0	\$0	150	\$1,886	\$9,683
United States	8	\$1,224	11	\$4,501	4	\$4,027	N/A	\$505	5	\$291	0	\$0	725	\$6,580	\$17,128
Uruguay	2	\$425	2	\$990	2	\$1,671	N/A	\$0	0	\$0	0	\$0	1,500	\$18,571	\$21,657
Vietnam	0	\$0	0	\$0	0	\$0	N/A	\$0	0	\$0	0	\$0	13,700	\$163,985	\$163,985
Virgin Islands (Brit.)	1	\$191	1	\$446	1	\$753	N/A	\$0	1	\$72	0	\$0	450	\$5,018	\$6,480

Appendix D: Task Order 2 Commodity Distribution for Africa, Asia, Europe/Eurasia, and the Middle East



Appendix E: Task Order 2 Commodity Distribution for Latin American Countries



Appendix F: Depopulation, Decontamination, and Disposal Kit and Surveillance Biosecurity Kit Item Lists

3-D Prototype Kit Components			
Equipment	Quantity	Justification	Risk
Sprayer with strap (2–3 gal)	1	Application of disinfectant to control vectors of transmission (vehicles, equipment, personnel, facilities)	Reduce the risk of recrudescence (reappearance of a disease) and cross-contamination
Brush (20" handle)	2	Facility, equipment, and vehicle decontamination of impervious surfaces in exclusion zone. Improve effectiveness of disinfectant by removing organic material, dirt, and grime.	Prevent recrudescence and cross-contamination
Brush (short handle)	1	Personnel decontamination in contamination reduction zone (CRZ). Improve effectiveness of disinfectant by removing organic material, dirt, and grime.	Prevent recrudescence and cross-contamination
Large biohazard bag	25	Contain and transfer infected carcasses and contaminated materials	Reduce risk of cross-contamination between the exclusion zone and CRZ.
Bucket (5 gal, collapsible)	3	One in exclusion zone, and one or two in CRZ	
Bucket (5 gal, hard plastic)	1	Exclusion zone	
Poly sheeting, opaque, minimum 6 mil thickness, 10' × 10'	2	Multi-use: ground cover, protective barrier, decontamination mat, modesty barrier.	Maintain integrity of site and reduce risk of cross-contamination between the zones
Containment bag with top (0.5 cubic meter)	2 bags	Contain and transfer red biohazard bags (of infected carcasses and contaminated materials). Provide controlled on-site storage and secure, sanitary secondary container.	Prevent recrudescence and cross-contamination
Outer gloves (leather palm, unlined)	10 pairs	Prevent punctures and cuts during depopulation and decontamination	Reduce risk of injury and infection for personnel. Maintain inner glove integrity.
Blunt-nosed scissors	1 pair		
Duct tape, model 8979 (slate blue, 48 mm × 22.8 m)	2 rolls		
Flocculent tablets (e.g., PUR® by P&G)	20 tabs	Maximize efficacy of disinfectant through pretreatment of water	Prevent inactivation of disinfectant by organic material found in dirty water

Flagging tape, 20 m/60 ft (orange with biohazard symbol, yellow, green)	3 rolls (1 of each color)	Zone delineation/demarcation	
Suitable disinfectant (e.g., Virkon)	5 kg (1 pail)		Prevent recrudescence and cross-contamination
Powdered anionic soap (e.g., Tide® with bleach, other laundry detergent)	2 plastic tubs (14 oz each)	Remove organic material, dirt, and grime from equipment and personnel (one in exclusion zone, and one in CRZ). Must contain surfactants suitable for cold and hard water use.	Prevent recrudescence and cross-contamination
PPE Plus (components below to be kitted together)			
PPE Tyvek Size XXL	10 kits		
Green nitrile gloves (9", e.g., Sol-Vex®)	10 pairs	Fluid barrier and chemical resistance	Reduce risk of injury and infection among personnel. Reduce risk of exposure to decontamination chemicals.
Apron (QC, yellow, e.g., DuPont Tychem®)	10	Fluid barrier. Limits exposure to fluids and enhances integrity of the coverall performance. Prolong use of coverall and eliminate the need for more expensive, less comfortable suit.	Reduce risk of injury, infection, and heat stress among personnel. Reduce risk of exposure to decontamination chemicals.
Disposable Hazmat boots	10 pairs	Fluid barrier. Limit personnel exposure and maintain integrity of coverall. Prevent punctures and cuts during depopulation, decontamination, and disposal. Traction prevents slips and falls. Allow broader use of footwear under PPE.	Reduce risk of injury and infection among personnel. Reduce risk of exposure to decontamination chemicals.

SBS Prototype Kit Components			
Equipment	Quantity	Justification	Risk
Sprayer (1 gal)	1	Application of disinfectant to control vectors of transmission (vehicles, equipment, and personnel)	Prevent recrudescence (reappearance of a disease) and cross-contamination
Brush (20" handle)	1	Personnel, equipment, and vehicle decontamination. Improve effectiveness of disinfectant through removal of organic material, dirt, and grime.	Prevent recrudescence and cross-contamination
Large biohazard bag	5	Disposal of PPEs and carcasses	Reduce risk of cross-contamination
Powdered anionic soap (e.g., Tide® with bleach, other laundry detergent)	1 small plastic tub (14 oz)	Clean organic material, dirt, and grime from equipment and personnel. Suitable surfactants for cold and hard water use.	Prevent recrudescence and cross-contamination
Bucket (5 gal, collapsible)	1		

SBS Prototype Kit Components

Equipment	Quantity	Justification	Risk
Disinfectant (e.g., Virkon, tablet form)	1 small container (50 tabs)	Small amount of disinfectant will be needed in multiple locations. Using the tablets lessens the likelihood of container cross-contamination and spread of the virus.	Prevent recrudescence and cross-contamination
Flocculent tabs	5	Maximize efficacy of disinfectant by pretreating water	Prevent inactivation of disinfectant by organic material found in dirty water
Blunt-nosed scissors	1 pair		
Duct tape, model 8979 (slate blue, 48 mm × 22.8 m)	1 roll		
Outer booties, Tyvek	10 pairs		
PPE Tyvek Size XXL	10 kits		

For more information, please visit deliver.jsi.com.

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