STOP AI QUARTERLY REPORT

July 1, 2009 to September 30, 2009

Stamping Out Pandemic and Avian Influenza (STOP AI)

October 30, 2009

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OVERVIEW

The United States Agency for International Development (USAID)'s Stamping Out Pandemic and Avian Influenza (STOP AI) project works at the nexus of animal and human health. STOP AI works to minimize animal health threats and the risk that HPAI becomes a human pandemic. STOP AI builds developing countries' capacity to prevent, detect, respond to, and stop HPAI and other zoonotic disease outbreaks and minimize the resultant economic and nutritional losses. In addition, it addresses select human health aspects of HPAI such as exposure during poultry production and safety measures taken during outbreaks. STOP AI offers a wide range of technical assistance and training services to regional and national governments, municipalities, commercial poultry producers, and nongovernmental organizations (NGOs) throughout the world to plan for and prevent outbreaks of HPAI. The STOP AI project's period of performance is February 24, 2007 to December 31, 2010.

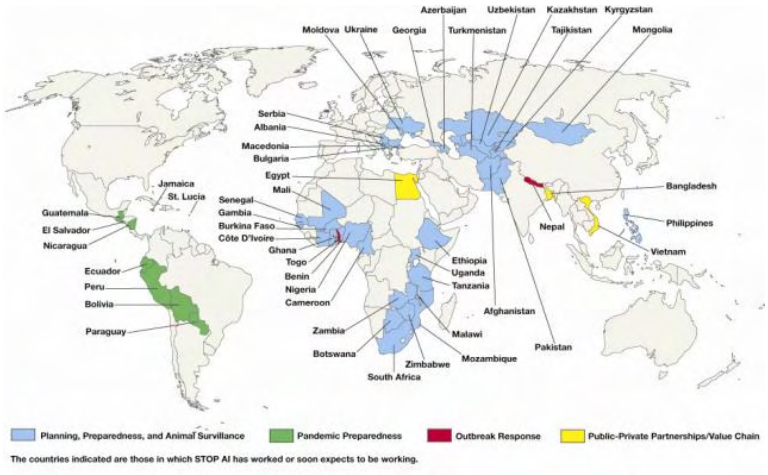
> *"You are doing great work."*
>
> - Martin Meltzer, Senior Health Economist, National Center of Infectious Diseases, CDC, on STOP AI

1. MANAGEMENT REPORT

DAI and its partners on STOP AI are proud of the progress the project has made through the third quarter of calendar year 2009, 31 months into project implementation. This quarter, STOP AI highlights the following results:

- Making poultry production and consumption safer in Vietnam
- Enhancing Nepal's disease outbreak response capacity
- Using and strengthening local implementing partners
- Opening of two new field offices
- Continuing to work around the world on AI projects
- Timely strengthening of pandemic influenza response capabilities in LAC

The map below shows the 49 countries where STOP AI is helping to or has helped build capacity and provide technical assistance so countries can better prepare for and respond to avian and pandemic influenza.



1.1 MAKING POULTRY SAFER IN VIETNAM

This quarter, STOP AI worked with Vietnamese supply chains to bring new, safe, semi-free range poultry products to market in the North and upgrade the biosecurity of poultry operations in the South.

Naturally Vietnam

Marketing Safe Poultry. The Proconco slaughterhouse released STOP AI-approved chicken products to the market in September. Branded "Naturally Vietnam," the poultry met the required levels of on-farm and slaughterhouse hygiene for enhanced food safety. The marketing campaign began in both small shops and large supermarkets such as Metro and Big C.

Improving Supply Chain Biosecurity. STOP AI helped three free-range poultry supply chains—Proconco, Go Cong, Ah Linh—improve their field operations with good animal husbandry practices (GAHP) and enhance biosecurity in small, rural slaughterhouses—including subjecting Proconco's northern slaughterhouse operations to rigorous inspection and training STOP AI also began planning for three new rural slaughterhouses for the southern supply chains.

The following chart shows the progress STOP AI has made helping different supply chains get safe products to market and implement good slaughterhouse practices (GSP). Next steps include:

- Increased intensity of field inspections to the seven supply chains in order to improve production efficiency and compliance with GAHPs.
- Set up of at least three rural slaughterhouses in the South and two in the North – in full compliance with project GSPs. Further maturation of existing Proconco slaughterhouse in the North.
- Solidification of marketing strategy for the South.
- Project participation a food and drink expo and a food fair in Hanoi
- Point of sale promotional materials with the "Naturally Vietnam" logo need final approval and mass production.
- Possible television programming in the North.

Supply Chain (with District and Province)	Availability of Live Chickens Produced According to GAHP	Availability of chicken carcasses produced according to GSP
Northern Supply Chains		
Proconco Soc Son, Hanoi	Since 08/2009	08/2009
ATK Dinh Hoa, Thai Nguyen	Since 08/2009	09/2009 (Using Proconco's slaughterhouse); Possible own slaughterhouse in 12/2009
BBC Quang Ba, Ha Giang	Expected for 12/2009	Possible slaughterhouse in 12/2009
Golden Rice Coop. Yen Dung, Bac Giang	Expected for 12/2009	Possible slaughterhouse in 12/2009
Southern Supply Chains		
An Linh Club Phu Giao, Binh Duong	12/2009	Planned with own slaughterhouse in: 11/2009
Go Cong Coop. Go Cong, Tien Giang	11/2009	Planned with own slaughterhouse in: 11/2009

1.2 ENHANCING NEPAL'S RESPONSE CAPACITY

With 60 H5N1 outbreaks occurring in 2009 in India, China, and Bangladesh—and two within its own borders in the first quarter of the year—Nepal is threatened by a re-introduction of HPAI as it persists in the region. STOP AI is continuing to build Nepal's capacity to prepare for and respond to outbreaks. This quarter, STOP AI and AI.COMM trained 24 District officers—including 10 from high-risk districts receiving STOP AI technical assistance—in interpersonal communications to improve their ability to mobilize Village Avian Influenza Technical Committees (VAITCs); conducted AI simulations in four districts—Sihara, Saptari, Sunsari, and Morang; assisted with the successful establishment of 51 VAITCs—each comprised of 15 members; and produced 3,000 copies of the Handbook on Avian Influenza Control and Prevention in Backyard and Small Scale Poultry Farms for paravets and VAITC members.

Simulation Exercises Occurred in Four Districts

For the simulations, STOP AI coordinated with the District Livestock Services Offices and Chief District Officers, selected simulation sites, mapped the areas with GIS, alerted the public about the simulations, established control rooms, and sent out rapid response teams to simulate the culling, depopulation, and disinfection. Quarantine, pit management, and medical teams also participated. District Avian Influenza Control Technical Committee members, Chief District Officers, security personnel, poultry farmers and entrepreneurs, and other regional observers watched the simulations. After each exercise, debriefings occurred at the control room.

1.3 USING LOCAL IMPLEMENTING PARTNERS

STOP AI understands that the best way to build a country's long-term capacity to prepare for and respond to AI outbreaks is to expand the knowledge of local organizations. In addition to providing training and technical assistance worldwide, STOP AI also partners with local institutions to implement its portfolio of AI activities. The following chart highlights our use of local and subsidiary organizations in our work to date.

Country	Local Partners	Role
Azerbaijan	AKTIVTA	Poultry Sector Mapping and Assessment
Azerbaijan	Azerbaijan Agribusiness Center, LLC.	Poultry Sector Mapping and Assessment
Azerbaijan	Jalilabad Agribusiness Center	Poultry Sector Mapping and Assessment
Bangladesh	Winrock	Logistics coordination
Bulgaria	FORA Foundation	Simulation development and training faci itation
Central Asian Republics	Project HOPE	Training Coordination
Central Asian Republics	Winrock	Project Implementation
East Africa	J.M. Mantle	Activity coordination with FAO
Egypt	The IFT Company	Stakeholder roundtable discussions in prioritized Delta hotpots for HPAI
Georgia	GIPA/GRDP	Logistics coordination and poultry survey
Ghana	ILC Africa	Logistics coordination
Ghana	Mel Consulting	Logistics coordination
Ghana	Winrock	Technical support
Moldova	FORA Foundation	Training facilitation

Mongo ia	Zhorig Foundation	Logistics coordination
Nepal	Winrock	Technical support
Nepal	International Development Enterprises	Technical support
Pakistan	Sosec	Logistics coordination
Philippines	Zuel ig Foundation	Logistics coordination
Southern Africa	ECI Africa	Logistics coordination
Uganda	CDFU	Logistics coordination
Ukraine	IRD	Logistics coordination
Vietnam	Asve is	Poultry supply chain certification
Vietnam	MDI	Poultry supply chain marketing

1.4 OPENING TWO NEW OFFICES

STOP AI opened two new country offices in August, 2009. Our new Accra, Ghana field office supports the West Africa portfolio of STOP AI activities. A team leader, training manager, and office manager staff the office. Our Cairo, Egypt office houses the team leader and a Finance and Administration manager responsible for the public / private participation work occurring in Egypt. We are currently looking for additional office support staff in Cairo. STOP AI is pleased to present this quarterly report for the period from July 1, 2009 through September 30, 2009.

1.5 TIMELY STRENGTHENING OF PANDEMIC INFLUENZA RESPONSE CAPABILITIES IN LAC

The focus of STOP AI work in Latin America and the Caribbean has been on pandemic preparedness and response; there have not yet been any H5N1 cases in poultry in the region. Consequently there is consensus that LAC would likely experience H5N1 first as a human disease as part of a pandemic beginning in a country where the disease is endemic in poultry. Thus, most of the assistance the STOP AI has provided in the region has been to Ministries of Health and of Disaster Preparedness, to develop or strengthen their Pandemic Preparedness and Response Plans, primarily at the municipal levels. STOP AI, in conjunction with other USAID partners working in the region, has developed a set of health and food security tools to help municipalities deal with a severe H5N1 or other influenza pandemic.

Among these tools, the municipal plans have been rolled out in a number of countries. In Nicaragua, for example, the STOP AI team has helped 104 of the country's municipalities understand how to develop municipal pandemic plans, develop them and begin to implement and monitor plan implementation. The team has worked in 11 of Nicaragua's 17 department-level integrated local health care systems, called SILAIS. The plans and other tools have been used to improve tracking and response to A/H1N1in the 104 municipalities we have supported.

2. GLOBAL ACTIVITIES

2.1 KNOWLEDGE MANAGEMENT

On September 30th, Dr. Fidel Hegngi, Senior Staff Veterinarian at Animal and Plant Health Inspection Service (APHIS) of the United States Department of Agriculture (USDA) presented his work, an Overview of a Regional Live Bird Market Workshop, to the STOP AI team in Cairo, Egypt from April 21st to 23rd, 2009. The workshop is part of APHIS' effort to help countries develop and implement National Poultry Improvement Plans (NPIPs). The Cairo workshop included public and private sector representatives from Egypt, Libya, Tunisia, Morocco, Sudan, and Algeria to discuss policy and private sector actions to attack HPAI problems.

One of the major themes of the workshop is that developing countries and the U.S. share common problems and concerns about biosecurity and disease transmission in live bird markets (LBMs). These similarities allow the application of many of the steps taken in the US to curb the spread of AI in LBMs to developing countries. In

addition, Dr. Hegngi emphasized the importance of involving all relevant public sector agencies in the dialogue—including including central, governorate, and district levels—along with private sector representatives.

STOP AI plans to follow up this presentation by Dr. Hegngi with a trip to the New York City- Pennsylvania live bird market system. Such a trip will help give ideas on how live bird markets in some of our focal countries, most notably, Bangladesh, Egypt, Nigeria, elsewhere in West Africa, and in Nepal, might be made more biosecure.

STOP AI's Knowledge Management team has added substantially to the STOP AI website (www.stopai.net), adding training material from nine countries.

In the upcoming quarter, on October 28th, 2009, Mary Miller, Senior Principal Development Specialist, will present options for developing private / public sector partnerships aimed at financing biosecurity in the poultry industry using her work in Indonesia as a case study. Wildlife Conservation will be the subsequent presentation theme. The intent will be to discuss the evolving views on the role of wild birds in the spread of AI and other zoonotic diseases.

2.2 VIRTUAL LEARNING

STOP AI has scheduled a virtual learning event for November 23rd or 24th on cleaning and disinfection activities with two STOP AI programs in Bangladesh and Nigeria, and a third FAO-led program in Indonesia. We will use a web-based platform, DimDim, which supports simultaneous PowerPoint presentation, dialogue, and virtual white boarding. This event is a pilot that we will use to assess the value of conducting additional learning events addressing different topics and countries. The virtual exchange has a significantly lower cost than traveling to a meeting, is more interactive than email, and combines multiple technologies for voice and visual presentation, thereby increasing participant engagement.

Participants from FAO and DAI's CBAIC Indonesia Project and STOP AI team leaders in Bangladesh and Nigeria have agreed to join the exchange. Meredith MacDonald from Training Resources Group, Inc. will facilitate the exercise and help the three teams develop short presentations on key challenges, main activities, and lessons learned. The virtual learning event is aimed at disseminating shared experiences and best practices pertinent to improving the biosecurity of live bird markets.

2.3 IMPACT EVALUATION SURVEY

STOP AI developed an impact evaluation tool to survey participants and compile information on knowledge retention and the practical application of course material. The survey, based on STOP AI's Biosecurity and Cleaning and Disinfection training modules, targeted participants who attended the Uganda, Nigeria, Ghana and the East Africa regional courses. In September 2009, STOP AI sent the survey to 170 STOP AI participants. The survey will be open to respondents through October. At the end of the survey period, STOP AI will review the results. Initial responses received to date from participants indicate a continuing interest in receiving technical information from STOP AI. Participants have also responded to share updates on the application of the knowledge and skills acquired during STOP AI's training workshops to their jobs and in conducting training courses in their own districts.

2.4 TRAINING

This quarter, STOP AI continued to tailor existing training manuals to the local context in a series of country activities including those in:

- Georgia (*Georgia Avian Influenza Outbreak Response*)
- Central Asian Republics
- West Africa
- Nigeria
- Egypt
- Zambia/Southern Africa

2.5 RESPONSE CAPACITY

STOP AI continued to collaborate with the DELIVER Project to secure in-stock and special-order AI commodities required for STOP AI technical assistance and training events, and to keep the DELIVER Project updated on STOP AI's projected need for AI commodities. In the second quarter of 2009, STOP AI resumed collaboration with the DELIVER Project and AI.COMM on the revision of the instructional inserts to accompany two new commodities kits designed to equip teams that conduct exercises in AI outbreak response surveillance and biosecurity (SBS), and depopulation, disposal, and decontamination (3-D). These efforts to develop instructional inserts for inclusion in the new commodities kits are on hold pending USAID approval.

2.6 RECRUITMENT

Vietnam Veterinary/Animal Health Law Expert. STOP AI recruited an international veterinarian/lawyer as a consultant to the Government of Vietnam's (GVN) Ministry of Agriculture and Rural Development (MARD) as it works to modernize laws regarding veterinary medicine. A project coordinator to support the International Veterinary Law Expert was also recruited. At the request of USAID/Vietnam and the API Unit in USAID/Washington's Office of Global Health, STOP AI will provide technical and organizational support to MARD's Department of Animal Health (MARD/DAH), which has a lead technical role in the development of the law. STOP AI support will include expert technical input on veterinary legislation through drafting and/or reviewing and commenting on draft legislation.

Egypt. The team has identified several staff members, including two veterinarians, who will provide technical assistance as well as an accountant with USAID program experience. STOP AI mobilized Hilary Langer, Program and Administrative Officer, to Egypt the week of September 6th.

2.7 CONFERENCES

American Veterinary Medical Association Meeting, Seattle, Washington from July 11th to 14th. Dr. Jarra Jagne, Senior Veterinarian for STOP AI, attended the AVMA convention as a member of the AVMA Poultry Medicine sub-group, the American Association of Avian Pathologists (AAAP). She presented a poster on "Biosecurity Risk Assessment of Live Bird Markets in Bangladesh and West Africa" that was on display for the four days of the conference. The poster detailed the results of on-site risk assessment exercises that were done as part of STOP AI's Biosecurity Training Programs in Bangladesh and multiple countries in West Africa. The poster also discussed the problems and possible solutions for improving biosecurity in markets. Jarra also delivered an update on H5N1 to the Association of Veterinarians in Egg Production (AVEP) and attended several sessions of the Public Health-One Medicine group that deals with zoonoses and international veterinary issues.

Humanitarian Pandemic Preparedness (H2P) Conference. Lisa Stone travelled to Hanoi, Vietnam to participate in the third of three Humanitarian Pandemic Preparedness (H2P) Conferences and present the LAC Pandemic Preparedness municipal toolkit on September 13th – 15th. The H2P project is a USAID-funded initiative designed to reduce mortality during a pandemic through preparedness and humanitarian assistance. The LAC Partner Pandemic Toolkit project and the H2P project share many objectives and technical approaches. STOP AI members sit on the technical working groups of H2P, and H2P members attend LAC Partner meetings to promote coordination. In addition, H2P tools have been incorporated into the LAC Partner Toolkit. STOP AI was invited to present the LAC Toolkit at regional H2P conferences in Ethiopia in April 2009, in South Africa in July 2009, and in Vietnam in September 2009. The H2P conference was a 3-day conference held in Hanoi, Vietnam that had 140 participants from nine Asian countries from the National Red Cross Red Crescent Societies, a variety of NGOs, and government officials (Ministries of Health, National Disaster

response committees, and national Avian Influenza and Pandemic Task Forces). Ms. Stone presented on the Impact Project Tool and the Triage Planning tool three times during one of the six concurrent presentations.

International Society for Veterinary Epidemiology and Economics (ISVEE).
Dr. Gary Mullins, STOP AI Senior Technical Advisor, attended the 12th meeting of the International Society for Veterinary Epidemiology and Economics (ISVEE) held in Durban, South Africa from August 9th to 14th. ISVEE is the largest international scientific body focusing on the issues of zoonotic diseases and their socio-economic implications. Almost 600 participants from SE Asia, Australia, Eurasia, Europe, Scandinavia, the United Kingdom, and North America attended this quadrennial event which provided numerous opportunities for practitioners working on leading research and applied field activities to exchange of information directly. HPAI was the only topic featured during each day of the conference. Gary returned with copies of presentations of great relevance to STOP AI, which will help ensure that STOP AI activities are aimed at those areas where they are most likely to have an impact.

3. COUNTRY ACTIVITIES

This section highlights STOP AI's ongoing and recently completed country activities undertaken this quarter.

3.1 ONGOING COUNTRY ACTIVITIES

AFRICA

3.1.1 NIGERIA

STOP AI has deepened its collaboration with USAID/Nigeria, the Ministry of Agriculture Federal Department of Livestock and Pest Control Services (FDLPCS), and other partners to implement activities aimed at increasing biosecurity in live bird markets (LBM) and smallholder farms in four states: Lagos, Kaduna, Kwara, and Kano. During the reporting period, STOP AI made an initial visit to each of the four states to observe the status of each live bird market's operations and assess the state of its biosecurity. STOP AI also identified a smallholder farm that will serve as a model farm for good biosecurity practice in each state, and met with representatives of the principal state and local level partners, STOP AI partners including state-level Ministry of Agriculture Avian Influenza Desk Officers, Local Government Councils, the Fowl Sellers' Association of Nigeria (FSA) and the Poultry Association of Nigeria (PAN). STOP AI then conducted a second round of visits to each state, in which STOP AI's technical consultant worked with partners to provide training on basic biosecurity principles, and introduced some procedures and practices that will become components of standard operating procedures for the live bird markets and smallholder farms. STOP AI participated in coordination meetings with other AI partners.

Next quarter, STOP AI will finalize and distribute the guidelines and procedures (G&Ps) that will form the basis for standard operating procedures for biosecurity measures specific to each market, and will continue to organize training and technical assistance visits to the farm and market sites. STOP AI plans also to distribute a sprayer, an initial quantity of disinfectant, and basic commodities required for cleaning and disinfection. STOP AI will also help market operators establishing a fee-based system to finance regular procurement of fuel and disinfectant to operate the high-powered sprayers. Dr. Jarra Jagne will travel to Nigeria in October 2009 to work with Dr. Garba Maina, STOP AI's on-site technical consultant, and conduct technical oversight of the STOP AI program in the four target states of Nigeria.

3.1.2 UGANDA

STOP AI is completing its work with the USAID Mission, the Ministry of Agriculture (MAAIF), and other AI partners in Uganda to strengthen district-level outbreak response capacity. At the beginning of June 2009, STOP AI launched new in-country activities growing out of the series of trainings STOP AI completed during the first

quarter of 2009. At that time STOP AI led the training of district-level rapid response personnel from 20 high-risk districts in the essentials of biosecurity, surveillance and response to H5N1 outbreaks. STOP AI returned to four of those districts designated by the MAAIF as especially high-risk districts to facilitate district-level integrated response action planning and response drill practice events.

District-Level Action Planning and Outbreak Response Field Practice. In the third quarter of 2009, STOP AI conducted four follow-on training events to reinforce the skills and knowledge of the district-level personnel. We targeted high-risk districts with field-based drills.

In June, STOP AI implemented a workshop to prepare event facilitators and conducted a pilot planning and drill practice event in the first district, Tororo. In the facilitators' workshop, STOP AI's Senior Veterinarian, Dr. Jarra Jagne, teamed with STOP AI's national consultant, Dr. Charles Musinguzi, to train a group of Ugandan facilitators to lead the planning and practice exercises in the targeted districts. The STOP AI advisor, consultant, and facilitators, accompanied by a senior MAAIF official, traveled together to Tororo District to implement the first of the planning and practice events. Three additional district-level action planning workshops were conducted in the districts of Masindi (July 21st – 23rd), Rukungiri (August 4th – 6th), and Soroti (August 18th – 20th), resulting in 49 district personnel being trained. Each workshop was attended by participants involved in HPAI from the veterinary, human health, and law departments.

The 3-day events were designed as an opportunity for district rapid response teams (RRTs) to develop and practice their own action plans for prevention and control and to set up command and control structures for avian influenza. Each of the four districts developed its own HPAI action plan that it later refined through follow-up technical assistance from STOP AI in-country technical consultant, Dr. Charles Musinguzi. Dr. Charles Musinguzi, and four STOP AI East Africa Regional Training alumni co-trainers, Dr. Deo Birungi Ndumu, Dr. Juliet Sentumbwe, Dr. Charles Joseph Aisu, and Dr. Emilian Ahimbisibwe, conducted the training in coordination with STOP AI logistics and administration subcontractor Communications for Development Foundation Uganda (CDFU).

STOP AI transferred the District-Action Planning and Outbreak Response Practice training model to the MAAIF as a means of continuing the training in additional districts.

3.1.3 WEST AFRICA HUMAN AND VETERINARY HEALTH

In addition to setting up its West Africa office in Ghana, and conducting the last of three assessments of poultry associations in West Africa, STOP AI conducted two major activities in its West Africa Regional program this quarter. The first, Integrated Avian Influenza Outbreak Response training, required regional implementation in both English and French speaking countries. The second activity involves developing an Avian and Pandemic Influenza course for field epidemiology students with either veterinary medicine or medical degree backgrounds pursuing their master's degrees.

Integrated Veterinarian and Human Health Training. This activity included the delivery of three West Africa regional 5-day training courses. The first was conducted in Accra, Ghana (in English) for participants from five Anglophone West African countries. Two courses were conducted in Dakar, Senegal (in French) for a total of eight Francophone West African countries.

- The Accra course was conducted the week of July 20th to 24th with 24 participants from Gambia, Ghana, Liberia, Nigeria, and Sierra Leone.
- The first Dakar course was conducted the week of August 17th to 21st with participants from Guinea, Mali, Niger, and Senegal. The second Dakar course was conducted August 24th to 28th with participants from Benin, Burkina Faso, Cote d'Ivoire, and Togo. A total of 39 participants attended the workshops in Dakar.

High-level ministry and university officials attended the opening ceremonies of each workshop. At the Ghana workshop, a variety of local officials gave welcoming remarks at the opening ceremony Monday morning, including:

- Dr. Josiah K. Taylor, retired Director of Veterinary Services, gave opening remarks.
- Dr. E.B. M. Koney, the Director of Veterinary Services gave a welcoming address.
- Dr. L. Ahadzie, Deputy Director of Public Health, Disease Surveillance Department, Ghana Health Service also gave a welcoming address.
- Dr. Baba Soumare, Sr. HPAI Technical Advisor for the USAID West Africa Regional Office, gave opening remarks.
- The Honorable John Tiah, MP, Deputy Minister in Charge of Livestock, Ministry of Food and Agriculture gave the keynote address.

The opening ceremony special guests of the first Senegal workshop included: Dr. L.O. Mbargou, Director of Veterinary Services and Representative of the Agriculture Minister; Dr. BA Mady, Representative of the Health Minister; Dr. Sambou, Representative of the WHO; Izetta Simmons, Representative of the Senegal USAID Mission, and Professor Yalace Kaboret, Interim Director of the Dakar Interstate School of Veterinary and Medical Sciences. The opening ceremony special guests of the second Senegal workshop included: Khadim Gueye, First Minister Advisor and Representative of the Agriculture Minister; Dr. Fall, Second Advisor and Representative of the Health Minister; Professor Louis Joseph Pangui, Director of ELSMV; and Izetta Simmons, Representative of the Senegal USAID Mission.

As part of STOP AI's capacity building strategy, the trainers used in the course were STOP AI alumni and network consultants from the region. The following Senegalese trainers who were trained by STOP AI in Senegal in November 2007 were involved in the West Africa Integrated Veterinary and Human Health activities:

- Dr. Yaghouba Kane
- Prof. Y. Kaboret
- Dr. Francois Elvinger
- Dr. Anne Ancia
- Dr. Issa Wone
- Dr. Ibrahima Seck

"Special Elective" Masters Course on AI Outbreak Response and Pandemics. As part of the Integrated Veterinary and Human Health activities, STOP AI is designing a curriculum "Special Elective" Course on Avian Influenza Outbreak Response and Pandemics which could be offered as a master's level course by Schools of Public Health.

The master's level course development began with a meeting with the African Field Epidemiology Network (AFENET) in Uganda in April, 2009 along with the identification of potential host universities and key contacts. While in Ghana for the first Integrated Veterinarian and Human Health workshop, STOP AI met with the key contacts at the University of Ghana who agreed to host the course in early 2010. Discussions are still underway with AFENET and programs in Senegal and Burkina Faso to select a host for the French speaking course. The development of the master's level course has been scheduled for November 23rd to December 4th. The development team consists of two STOP AI human health trainers, one of the trained French speaking human health facilitators from Dakar, and two veterinarians (one each from the University of Ghana and the University of Dakar). The course will be held in Ghana in February or March 2010. Once developed, the course will be translated and adapted to a French speaking context, and a host university will be selected to offer the course. Once finalized and approved by AFENET, the course will be available to all countries and universities that are interested in hosting it. STOP AI is in preliminary discussions with the University of Ghana about offering this course in 2010.

Strengthening Regional Laboratory IATA. To support the broader effort led by the Food and Agriculture Organization (FAO) to strengthen the diagnostic capacity of laboratories in West and Central Africa, STOP AI collaborated with FAO to deliver three regional workshops intended to increase quality assurance and improve

laboratory practice across the two sub-regions. STOP AI contributed technical input throughout each five-day workshop.

The workshops were divided into two modules: Module 1, on Establishing / Improving Quality Systems in the Network's Laboratories was led by FAO and technically supported by STOP AI, and Module 2, on Shipping Avian Influenza Samples by Air: International Air Transport Association Dangerous Goods Regulations, was led and delivered by STOP AI.

The workshops, organized by FAO, were held in Dakar for West African participants and in Douala for Central African participants, between June and September 2009. The third workshop is planned for November 2009 and will be held in Accra, Ghana.

- June 29th to July 3rd, 2009, the USAID STOP AI team of Drs. Jarra Jagne and Yaghouba Kane joined colleagues from the Food and Agriculture Organization Emergency Center for Transboundary Animal Disease/Regional Animal Health Center (FAO/ECTAD/RAHC). Participants were 23 laboratory personnel from countries in West and Central Africa in collaboration with FAO/ECTAD/RAHC. Countries represented at the workshop were Senegal, Guinea Conakry, Guinea Bissau, Cap-Vert, Mali, Burkina Faso, Ivory Coast, Niger, Togo, Benin, and Mauritania.
- September 14th to 18th, 2009, the USAID STOP AI team of Drs. Jarra Jagne and Yaghouba Kane conducted the second of three five-day regional Diagnostic Laboratory Quality Assurance Workshops for 19 laboratory personnel from Cameroon, Equatorial Guinea, Gabon, Congo Brazzaville, Congo (DRC), Central African Republic, Chad, and Sao Tome and Principe.

Opportunities to Strengthen and Expand the Role of the Private Sector in a Coordinated and Sustained Effort to Control Avian Influenza. STOP AI completed assessments of the capacity of the poultry producers association in Burkina Faso and Benin Republic as well as the capacity of the poultry value chain associations in Ghana and Sierra Leone to respond to the threat of HPAI as a country and in a regional context. The objective of these assessments was to compile information on the organization, functions, and operations of existing poultry producers associations and poultry marketing organizations and identify constraints which will enable formulation of rationale capacity building plan for the control of Avian Influenza in the country. These assessments form the basis for our expanded regional program to strengthen capacity to control HPAI.

Office Start Up. STOP AI and in-country implementing partner, Ivy League Consult Africa (ILC), selected an office space and, under Dr. Timothy Obi's direction, ILC will coordinate the third West Africa Regional Laboratory IATA training in Accra, Ghana, planned for November 2009.

ASIA NEAR EAST REGION

3.1.4 BANGLADESH

The STOP AI country team achieved substantial accomplishments during this quarter. We completed the Cleaning and Disinfection (C&D) pilot activities in two Dhaka markets, officially transitioned the oversight of these market activities to FAO, and began the PPP activities in Dinajpur and Gazipur. Specifically, STOP AI team completed the following:

Karcher Training. STOP AI completed a Karcher Training job aid for use by committee market cleaners and members. The pictorial job aid shows detailed step by step instructions for the proper use and cleaning of the Karcher machines. This was part of the C&D activities in the Mohamendpur and Kaptan Bazar Markets, and has the promise of making all of Dhaka's live bird markets much safer places for customers and .

Baseline Data Collection. STOP AI hired and trained 20 data collectors responsible for completing a Biosecurity Knowledge and Practice Baseline survey. In teams of two, STOP AI data collectors canvassed the Upazillas in Gazipur and Dinajpur districts, completing 1,346 face-to-face baseline surveys with commercial and backyard producers, market sellers, transporters, feed sellers, hatchery owners, and slaughter house facilities. In addition to the survey data, the teams collected geospatial data which we plan to analyze along with historical outbreak and transportation data to identify patterns of risk. The baseline survey was a key element for the PPP activities and was used to identify risk factors which were discussed with stakeholders.

Stakeholder	Gazipur	Dinajpur
Commercial broiler producers	572	123
Backyard producers	218	342
Transporters	13	22
Retail & Slaughter house	18	38
TOTAL	821	525

The two-part questionnaires included a common section focusing on knowledge of AI, and a section tailored for each respondent group.

While there are interesting data points and differences between the two districts, the major conclusion from the surveys is a clear need for increased understanding of HPAI risks and transmissions along with basic biosecurity safety. There was a fairly high level of general awareness and concern of AI but a large numbers of respondents did not know how to protect themselves or their birds from infection and did not know how the virus was transmitted or could be killed.

Poultry Value Chain. During a trip to Bangladesh, Rich Magnani, STOP AI Senior Technical Advisor, worked with the district vets and data collectors to finalize the mapping of poultry value chains in Gazipur and Dinajpur. This data, along with the baseline survey, was used to identity risk factors which were discussed with the stakeholders.

Aside from volumes marketed and distance from Dhaka, there are no striking differences between the Gazipur and Dinajpur value chains. The commercial chains appear to be direct (i.e., free of middlemen that provide little or no service but increase the transfer and handling of birds and add layers of margin to the final price). Agents and sub-agents positioned between hatcheries and farmers may increase inefficiencies, but many supply needed embedded credit for inputs to small farmers. Similarly, the backyard chains are relatively direct.

About 215,000 birds per day are transported to and sold in Dhaka wholesale and retail markets. Of this volume, Gazipur and Dinajpur combine to supply about 80,000 to 90,000 birds to Dhaka per day. As with any value chain, there are points throughout the chain that pose potential HPAI transmission risks. The risks increase substantially at the points where birds are aggregated by large producers, traders, wholesalers, and transporters and where there is significant interface between humans and poultry. In examining the value chains in the two districts the following risk points emerged:

a. Deshi wholesale markets in Dinajpur where wholesalers purchase, store, sort, assemble, and ship thousands of birds every day to Dhaka.

b. Transportation of the large daily volume of birds to Dhaka by a mix of private and public vehicles, including 3-wheeled bicyclists hauling 2 to 4 small bamboo containers, 10 to 15 larger bamboo containers atop public buses, dedicated pickup trucks with capacities of 1,000 to 1,200 birds, and even larger trucks.

c. Poor physical conditions and cleaning practices in the Dhaka wholesale markets.

d. Large slaughter volume in unsanitary conditions.

Stakeholders' Workshops in Gazipur and Dinajpur. Lisa Howard-Grabman, Training Facilitator, worked with Shankar Mondal, STOP AI Bangladesh Country Team Leader, and the country staff to conduct stakeholders' workshops in Gazipur and Dinajpur. The purpose of the stakeholder workshops was to mobilize poultry sector stakeholders in Gazipur and Dinajpur to improve biosecurity in their districts and promote and protect the safety of their poultry and people. During the workshop, stakeholder working groups were established for eight Upazillas in Gazipur and six Upazillas in Dinajpur. These working groups will be partners for STOP AI and engaged in identifying and implementing selected biosecurity improvement activities within the districts.

Following the district workshops, the STOP AI team analyzed all stakeholder action plans to identify common priorities, feasibility for implementation, and proposed plans for implementation. Of all risk factors and proposed solutions, the following five were most prominent areas of concern identified in the baseline survey, stakeholder action plans, and workshop dialogue. The desired results listed are those identified by stakeholders in the workshops and will need to be further specified and tied to measurable indicators before project implementation begins.

a. Risk Factor: Lack of knowledge regarding biosecurity at all levels
   Desired Result: Awareness of biosecurity is increased

b. Risk Factor: Chickens and ducks are housed together and with humans
   Desired Result: Separate species are housed separately from one another and from humans

c. Risk Factor: Improper disposal of poultry litter and waste
   Desired Result: Poultry litter and waste is disposed of properly

d. Risk Factor: Inability to identify and distinguish between poultry diseases
   Desired Result: Newcastle disease vaccinations will allow farmers to identify AI more easily

e. Risk Factor: Lack of cleaning and disinfection practices
   Desired Result: Proper cleaning and disinfection, including vehicle spraying, is practiced

Given the key risk factors discussed above and the feedback from the workshops, STOP AI believes there is great value in implementing the following interventions:

- Expanding biosecurity training in these two districts to include targeted training for commercial farmers, small backyard producers, market committees and sellers, and transporters;
- Improving the cleaning and disinfecting practices within the key terminal markets in the districts;
- Engaging communities in biosecurity improvement efforts that focus on low-cost separate houses for poultry and education for women and children; and
- Exploring fee-for-service or self-funding mechanisms that will allow commercial farmers to leverage resources to make modest changes in their biosecurity and production practices.

3.1.6 EGYPT

In July 2009, STOP AI Deputy Chief of Party Rob Ryan-Silva, STOP AI Senior Technical Advisor Rich Magnani, and STOP AI Egypt Finance and Administration Manager Hilary Langer, traveled to Cairo for the Egypt office start-up. During this period they worked with STOP AI Egypt Team Leader Dr. Farid Hosny, part-time outreach consultant Mohamad Gomma, and Yilma Jobre of FAO to further develop the Egypt work plan. The team met with major poultry producers including the Board members of the Poultry Union in Cairo to introduce the project and solicit feedback on programming strategies. The team secured office space near the FAO headquarters in Dokki, Cairo, and occupied the space on August 15th.

Outreach to Private Sector. The team continued to reach out to the private sector during Ramadan (August 21st to September 19th), took part in several Iftars (the evening meal which breaks the fast evening during Ramadan), including Iftars hosted by the FAO, the American Embassy, Egypt Veterinary Associates, the Cairo Poultry Company, and GOVS. The gatherings provided opportunities to discuss program objectives and resulted in numerous formal follow-up meetings.

As a result of meetings with the private sector, STOP AI secured sponsorship from IFT (The International Free Trade Company) for the first three Delta roundtables that will bring together small and medium-sized poultry producers in Gharbia, Sharqia, and Dakahlia. In addition to financial support for the roundtables, IFT reached out to its clients to increase interest in STOP AI's activities, agreed to share vaccine sales information with STOP AI, and expressed interest in ongoing sponsorship for AI trainings. Additionally, the American Soybean Association agreed to sponsor future STOP AI roundtables. The association invited STOP AI to present at its annual meeting in Egypt this December, agreed to reach out to its clients in support of STOP AI, and expressed interest in upcoming opportunities to sponsor trainings or roundtables.

Program Update. The team also participated in several Avian Influenza conferences and coordinated upcoming activities with the USAID-sponsored SAIDR project, Communication for Healthy Living (CHL), GOVS (General Organization for Veterinarian Services), and the FAO.

Plans were finalized for the October 3rd to 5th Outbreak Response Training for 28 GOVs vets to be conducted in conjunction with FAO. The three-day training will cover best practices, challenges in application, and a simulation of all outbreak response procedures at a poultry farm. The STOP AI team is working with FAO to develop another outbreak response training planned for December of 2009.

3.1.7 NEPAL

Nepal experienced the first outbreak of H5N1 in January 2009. The disease was effectively controlled and contained within the Jhapa District, and up to the date of publication, the disease is not detected in other parts of Nepal. Nepal submitted its final report certifying a declaration of AI disease-free status to OIE on August 9th, 2009. However, there is always the threat of an AI outbreak as neighboring countries such as India, China, and Bangladesh recorded outbreaks of AI in each month of 2009 with the exclusion of July. Given the new outbreaks reported in neighboring countries, STOP AI focused project activities in Nepal on control and containment of AI.

The project objective has been to improve preparedness and planning to contain bird flu by supporting improved district level preparedness and capacity to implement the national AI plan in five project districts. The second objective is to improve early detection of H5N1 in wild birds and poultry by training government, community, and poultry stakeholders in internationally accepted surveillance methodologies. The third objective is to prepare government and stakeholders for rapid response and effective containment measures in poultry populations in outbreak containment procedures.

Simulation exercises remain the major activity in the month of July. In August and September, STOP AI focused on establishing and training Village Avian Influenza Technical Committees (VAITCs), as well as paravet training and development of District Contingency Plans for Ilam District that are planned for October.

1. STOP AI District Coordinators participated in a training on Inter-Personal communications for Avian Influenza by AI.COMM on August 13th and 14th. Of the 24 people who attended the training, 10 were involved in STOP AI projects in the high-risk districts, including three STOP AI District Coordinators. Government of Nepal District officers, Training officers of

regional Training Center of the Eastern Region, and STOP AI district coordinators received Inter-Personal Communication to improve their skills in social mobilization which will aid in their work with the VAITCs.

2. Simulation Exercise on AI in four districts of the project has been successfully conducted. The program received good coordination from all the stakeholders.
3. 51 VAITCs have been established successfully in the entire border Village Development Committees (VDCs) in proximity to the Indian border. The program is drawing appreciation from the government, District Administration, Poultry Industry people, and the village communities. Members of VAITC who are going through the Orientation training program are very much enthusiastic to work for the community. VDCs are promising to allocate VDC fund if these committees could develop appropriate programs. Some of the committee has been engaged in stopping illegal import of poultry and its products from India. More interestingly, cooperation of local police with the VAITC is improving and the VDC secretary feels relief from the engagement of the communities to expedite their function.
4. Both RAICCC (Regional Avian Influenza Control Coordinating Committees) and DAICTC (District Avian Influenza Control Technical Committees) institutional arrangements are functioning and are supportive to VAITCs.
5. 3,000 copies of "Handbook on Avian Influenza Control and Prevention in Backyard and Small Scale Poultry Farm has been produced in Nepali version for Paravets and VAITC members and is in distribution.
6. Appointment and Transfer of Staff: Dr. Baikuntha Parajuli has been appointed as a new Senior STOP AI Consultant (Vet.) for central office; Dr. Santosh Karn has been recruited as District Coordinator for Morang district; Dr. Shuvash Chaudhary has been the new District Coordinator for Sunsari district since August; Dr. Pushpendra Shah of Saptari district was transferred to Jhapa district beginning in August 2009.

Next quarter, STOP AI plans to complete the orientation trainings of VAITCs through October 2009. Meetings are scheduled in October to work with the Ilam District to develop the District contingency Plan. STOP AI will also continue the Paravet training workshops in the next quarter with an event in Ilam planned for October.

HPAI Simulation Exercises. A Contingency Plan is essentially a district-based operational plan with guidelines to respective stakeholders for quick response in the event of an HPAI outbreak, with the goal of stamping out the AI virus and preventing further spread of infection. To ensure effective implementation of the District Contingency Plans (DCP), STOP AI coordinated with the Department of Livestock Services (DLS) to organize simulation exercises on HPAI in four districts of Eastern Nepal: Siraha, Saptari, Sunsari, and Morang. The exercises were held July 7th – 24th. The exercises included procedures for defining the epidemiological unit of the simulation site, estimating poultry production to assess the requirements of the RRTs and outbreak response logistics, GIS mapping of the infection area, broadcasting public messages regarding the nature of the AI Control Simulation Exercises with the objective of prevention the panicking of people in the community, and establishing a control room to run the simulation logistics. Observers' comments include:

"Such simulations are highly appreciable [sic]and need to be carried out for quick response to the outbreak."

"Some of the Government of Nepal observers suggested that simulation exercises need to be [conducted on a] regular basis and should also be incorporated in the DLSO programs from the government budget.

The exercise helped to increase the confidence of DLSO technicians regarding the control and containment of HPAI.

Establishing Village Avian Influenza Technical Committees (VAITCs). In keeping with the DAICTC established Bird Flu Control Order, village-level committees are established to help thwart illegal poultry travel in the Village Development Committees (VDCs) that border India, stop the AI virus from being introduced through illegal trade of poultry, implement intensive mass awareness activities within entire VDCs, and conduct monthly meetings to review the Bird Flu situation in the context of VDC, National and International

3.1.8 VIETNAM

Poultry Supply Chain Activity. STOP AI continued work with and the development of supply chains to produce local breeds, reared in semi-free ranging environments poultry and poultry products under highly biosecure conditions. During the third quarter, STOP AI provided continued and intensive capacity building to three free range supply chains (Proconco, Go Cong, An Linh) identified during the previous quarter, and identified and provided preliminary capacity building for an additional four chains in the North and South (see tables below). The "umbrella standards" for production and biosecurity originally established for the project have matured into "project-approved" Good Animal Husbandry Practices (GAHPs) for field operations, and Good Slaughtering Practices (GSPs) for small rural slaughterhouse operations. These sets of practices have been established by the ASVELIS Team, STOP AI's implementing partner responsible for capacity building for supply chain participants based on a combination of local expertise and international best practice. Planning for the establishment of three rural slaughterhouses was set in motion for the Southern Supply Chains, and an existing medium-size slaughterhouse operated by Proconco (in the North) was subject to rigorous inspection and training regimes. The process of ordering slaughterhouse equipment experienced many delays, but finally an order was placed for French equipment which will equip three Supply Chains in the South. Marketing and promotional activities were focused in the North, where project-approved chicken carcasses from the Proconco slaughterhouse were released to the market in September by STOP AI's implementing partner, International Market Development and Investment JSC (MDI). A project logo "Naturally Vietnam" was developed for the project's free-range chicken, which claims a high level of both on-farm and slaughterhouse hygiene to reduce disease and improve food safety. The seven Supply Chains are tabulated in the Executive Summary section, with anticipated dates for the production of project-approved live and slaughtered chicken.

Marketing and promotional activities were initiated in the North and South, including the production of informational flyers, web-site set up, distribution of project newsletters, and meetings with potential wholesale and retail buyers.

Major Progress Against Workplan.

- STOP AI clarified procurement procedures for slaughterhouse equipment with USAID Contracts Officer in June 2009. The first batch of imported equipment was ordered from France in September and arrival in Vietnam is expected in late November. This equipment will support three rural slaughterhouses in the South.
- Project personnel from Asvelis and MDI identified and provided technical and marketing support to a total of seven supply chains (four in North, three in South). Support has included development of Memorandums of Understanding, numerous on-farm visits to teach production efficiency and Good Animal Husbandry Practices (GAHP), and development of preliminary commercial channels.
- Extensive training in Good Slaughterhouse Practices (GSP) provided to the existing Proconco slaughterhouse in the North. Fully approved free-range carcass meat bearing the project "Naturally Vietnam" logo was produced in late September and offered for sale to small shops catering to the expat community on October 3rd.
- First project "Monthly Bulletin" completed, approved by USAID/Vietnam, and distributed to several hundred project stakeholders in July. The issue was entitled "Free-Range Chicken and Signs of Quality." Major topics addressed were production strategies, Histomonas disease control, small-scale

slaughterhouse design and development, slaughtering impact on taste and texture, and summaries from the MDI market assessments.

- Second project "Monthly Bulletin" drafted in September, and is expected for release in October.
- Project website set up (but not activated) and material for website population collected, organized, and uploaded.
- Information sheets on the project chicken developed and distributed to wholesale and retail buyers; "Naturally Vietnam" project logo established.
- Pilot marketing and promotion campaign for "Naturally Vietnam" chicken initiated in key small shops and with large supermarkets such as Metro and Big C.

- Bookings made for project participation in national trade fairs in HCMC and Hanoi.

Veterinary Health Law Reform Activity. After Dr. John Bowman, STOP AI Vietnam Activity Manager, led a formal meeting at the Department of Agriculture and Rural Development/Department of Animal Health (MARD/DAH) to better understand the nature of their request in veterinary law reform, STOP AI and DAI's STAR II projects have worked collaboratively to further design an activity suitable for MARD/DAH. An activity combining MARD/DAH needs for support of provincial fact finding missions (FFMs) and STOP AI interest in providing international technical support was designed and submitted to USAID for approval. Recruitment activities for international and local consultants were undertaken. An implementation plan and budget were formalized and are subject to the approval of USAID in October.

Major Achievements Again the Work Plan:

- After a series of deliberations with MARD/DAH facilitated by colleagues in the STAR Project, a preliminary workplan and budget were submitted to USAID/W and USAID/Vietnam in late September based on STOP AI support of provincial fact finding missions (FFMs) for a senior law drafting delegation.
- An intensive recruiting campaign was undertaken to find an international expert with a combination of veterinary and legal drafting skills, and to find a local Vietnamese veterinarian with similar background and strong English skills. The basic approach was to team these two individuals together to provide expert perspective during the FFMs and provide MARD/DAH with written comments on evolving drafts of the law. A suitable international candidate was found, but eventually it was determined that the services of a local veterinarian would not be needed.

EUROPE AND EURASIA

3.1.9 AZERBAIJAN

During this quarter, STOP AI ended its Azerbaijan Country Program, which ran from May 20, 2008 to August 31, 2009. The originally-planned Azerbaijan program contained three project activities where STOP AI offered its assistance:

- Strengthening animal health inspection at border points;
- Helping develop operational guidelines and procedures for the National AI Preparedness and Response Plan; and
- Developing rural passive surveillance and outbreak capacity by training public and private veterinarians as well as sector 2 and 3 poultry producers (FAO definition).

After receiving input from the Mission and the Azerbaijan State Veterinary Service (SVS) and completing our work plan, STOP AI focused primarily on Activity C, targeting three audiences in the officially-determined 15 AI risk

rayons and four rayons with relatively important poultry production: (a) public and private veterinary master trainers at national level; (b) veterinarians of private veterinary units (PVU) throughout the country; and (c) sector 2 and 3 poultry producers. Because of a shift in the mandate of animal health inspection at border points from the program's primary counterpart, the State Veterinary Service (SVS), to the State Customs Committee on January 1, 2009, the program did not proceed with work at border points (originally proposed as Activity A). The World Bank-financed AI Preparedness Project (AIPP) took the lead in developing the *National AI Preparedness and Response Plan* and associated activities (originally proposed as Activity B). The adjustment in our approach is reflected in two work plan realignments.

Program Results. STOP AI has had a substantial impact in the training of veterinarians and poultry producers in HPAI H5N1 in Azerbaijan. A total of 18 public and private veterinarians graduated from the training program as Master Trainers, trained in the materials and how to deliver them, and were charged with delivering cascade trainings. Private veterinarian master trainers trained 107 veterinarians attached to PVUs throughout Azerbaijan, covering 39 rayons. They also conducted 50 trainings of 1,712 sector 2 and 3 poultry producers from the priority 10 rayons.

STOP AI Azerbaijan developed and disseminated training material for each of the three training levels/audiences (e.g. for veterinarians 200 AI training manuals, for poultry producers 2,000 copies of the Biosecurity Manual in Poultry Production). STOP AI also provided to all the veterinarians as well as to the SVS a Poultry Disease Manual (2,500 copies) containing information on AI identification. We also developed and disseminated two technical AI biosecurity materials associated with our training events with 3,000 copies to public and private veterinarians and 7,000 to poultry producers.

Capacity Building. STOP AI helped build institutional and individual capacity to address AI prevention, identification, and outbreak response both nationally and at the village level, exemplified by training organized private veterinarians and poultry producers.

Collaborations with International Organizations and Donors. STOP AI collaborated closely with the World Bank Agricultural Development and Credit Project (ADCP) and Avian Influenza Preparedness Project (AIDP) in the provision of training of organized private veterinarians and poultry producers. The extent and quality of this teamwork was highlighted in an email and in personal communication with Brian Bedard, World Bank Senior Livestock/Veterinary Specialist and Avian and Human Pandemic Influenzas Regional Coordinator for Europe and Central Asia. Information exchange with Defense Threat Reduction Agency/Biological Threat Reduction Program (DTRA/BTRP) and Academy for Educational Development (AED) Avian Influenza Communication (AI.COMM) took place on a regular basis to avoid the duplication of work and increase reach and impact.

STOP AI Azerbaijan achieved the following objectives, which are in line with USAID and OIE guidelines for assistance in developing and transitional countries:

- We informed public and private veterinarians as well as sector 2 and 3 poultry producers about infection channels and risks related to AI;
- We promoted better farming practices and improved hygiene;
- We increased the awareness of the risk of poultry infection with our technical publications and training material; and
- We disseminated information to improve biosecurity measures and disease prevention in poultry production.

3.1.10 CENTRAL ASIA REPUBLICS

During the reporting period STOP AI CAR made significant progress against its work plan. STOP AI also continued actively collaborating with local governments and the donor community to increase impact by combining forces and building on comparative advantages across projects.

Assisting the local poultry industry. STOP AI CAR provided direct technical assistance to local small and medium commercial poultry producers and veterinarians on Disease Management and Biosecurity Practices. The

project, then, delivered the following two 4-day trainings on Poultry Production, Biosecurity, and Disease Management for 49 small and medium-scale commercial poultry managers and veterinarians and state veterinarians working with the poultry industry:

1. In-country training in Tashkent, Uzbekistan from July 29th to August 1st. STOP AI's partner in Uzbekistan, Project HOPE, organized the logistics of the training.
2. CAR regional training in Issky Kul, Kyrgyzstan from August 7th to10th. STOP AI also promoted partnership between the veterinary services and the commercial poultry industry by inviting relevant key state veterinary specialists to the trainings.

Enhancing CAR countries preparedness and response capacity: STOP AI CAR continued providing assistance to evaluate and revise national Preparedness and Response Plans (PRP). STOP AI successfully communicated the need for having local HPAI H5N1 outbreak response plans on internationally accepted practices and local realities with the local governments. As a result of this work, most of the CAR countries appreciated the importance of such plans and requested STOP AI's assistance to develop the plans.

As an outcome of the Preparedness and Response Plans meetings, STOP AI developed a detailed series of technical specifications for writing local response plans. The material was shared with government and donor partners in Kyrgyzstan. On September 25th, we organized an orientation seminar with key STOP AI master trainers (both animal and human health specialists) from all seven oblasts of Kyrgyzstan in Bishkek, Kyrgyzstan. Kairat Davletov and Damira Bibosunava of USAID Almaty and Bishkek missions also joined the meeting. One key lesson learned from this activity is that, as key implementers, oblast task forces should be responsible for writing these plans. In the next reporting quarter, we will continue to hold similar seminars in the other STOP AI CAR countries.

The veterinary services of the CAR countries, with technical direction of the project, will announce competition for the best local response plan. The STOP AI master trainers will give technical direction in developing local response plans, even though it would be the responsibility of the oblast governments to write them.

Improving Veterinary Laboratory Capacity: In response to the multiple requests of the central veterinary laboratories of the Central Asia countries, STOP AI CAR, in collaboration with Synbiotics, prepared for a 2-day regional training on Laboratory Diagnostics and Dangerous Goods Regulations of International Air Transport Association (IATA) planned for December 16th -17th. Specifically, the training will consist of two parts:

- *One-day certified IATA training*: The purpose of the training is to train personnel responsible for preparing and packaging infectious substances to be able to comply with regulations established by the IATA for the international air shipment of infectious substances.
- *One-day Laboratory Diagnostics training*: The purpose of the training is to train lab personnel to be able to do sample preparation, testing, result interpretation for virological and/or serological detection of HPAI and other poultry diseases. Dr. Chinta of Synbiotics kindly offers to cover the Laboratory Diagnostics training.

World Bank Kyrgyzstan Project Implementation Unit (PIU) Rayon-level HPAI Biosecurity, Surveillance, and Outbreak Response Replications. Especially fruitful was the cooperation with the World Bank, which was very interested in using our technical direction (including participant manuals, maps, master trainers, and training standards) to train 950 local level veterinary and health specialists throughout Kyrgyzstan in fall 2009.

On September 24th, STOP AI organized a country coordination group meeting of the STOP AI master trainers with the request of the World Bank funded Kyrgyzstan MoA PIU. We helped the PIU make detailed training schedules and conduct material rehearsal. The World Bank also asked STOP AI to conduct monitoring of the

PIU trainings which will start on October 5th, 2009 and provided a cost-sharing arrangement through which the World Bank will cover all the transportation and lodging cost related to this monitoring activity.

Technical Guidance. STOP AI CAR provided in-country implementing partners and collaborators with guidance developing technical materials to ensure a sound technical approach. Examples of STOP AI's role, providing technical assistance in the CAR region include:

- STOP AI CAR team reviewed the FAO draft functional SOPs at the request of Joldosh Dadybaev, the FAO focal point in Kyrgyzstan. The review was shared to the USAID CAR mission.
- Joldosh Dadybaev and Armen Asatryan of STOP AI CAR participated in the CDC workshop on pandemic influenza planning in Bishkek, Kyrgyzstan on September 19th. The representatives of the Ministry of Health of Kyrgyzstan, along with Dr. John Moran (CDC) and Mark Witschi (WHO) gave an update of A H1N1 Swine Flu virus and the recommended outbreak response strategy including vaccination. STOP AI team actively participated in the pandemic preparedness discussion at the end of the meeting.

STOP AI has offered replicating its trainings to partners from the local governments, poultry industry, and international donors. This idea was welcomed by the CAR poultry operations, poultry associations, and the World Bank. The poultry industry sees STOP AI's "Poultry Management, Diseases, Biosecurity and Outbreak Response" training as direct contributor to the productivity and biosecurity of its operations. The local governments are willing to cost-share but due to lack of funding cannot support cost-shared trainings.

Biosecurity, Surveillance, and Outbreak Response. STOP AI CAR team member Innesa Ashirova (Project HOPE/STOP AI CAR) worked in partnership with Radjapbaeva Gulara, an Epidemiologist of the Center of State Sanitary Epidemiology Control of the Ministry of Health, to deliver a 1-day Biosecurity, Surveillance, and Outbreak Response training to 25 veterinary and health specialists from Djizak oblasts. The training program was designed to convey technical content and further develop capacity of District-Level personnel in Uzbekistan. The training took place in the Galliaral districts on August 18th

3.1.11 GEORGIA

Biosecurity Cascade Trainings. STOP AI conducted a 2-day Biosecurity Cascade Training in Georgia on June 16th and 17th. Twenty-four participants from the Adjara and Guria regions attended the training. STOP AI Master Trainers Drs. Lena Ninidze and Maya Nadirashvili conducted the training. STOP AI Master Trainers Drs. Jimsher Osiashvili and Ketevan Tsiklauri conducted the last regional Biosecurity Cascade Training in Zugdidi from June 22nd to 23rd. Sixteen participants from Samegrelo-Zemo-Svaneti and Racha-Lechkhumi regions attended the training. STOP AI Implementing Partner, the Georgian Institute for Public Affairs / Georgian Rural Development Program (GIPA/GRDP), organized the Biosecurity Cascade Trainings and assisted the Master Trainers throughout the workshops. From February to June, STOP AI conducted one National Level and six Regional Level Biosecurity training events that included 138 public and private veterinarians from each of the regions in Georgia as participants.

Outbreak Response Cascade Trainings. STOP AI began the Outbreak Response Training for Georgia with a 3-day course entitled *Georgia Avian Influenza Outbreak Response,* held at the Bazaleti Palace hotel in Tbilisi, Georgia, from September 9th to 11th. The training course was designed to introduce and then incorporate the *Poultopia Disease Outbreak Scenario* throughout each module. Dr. Miles and Ms. Fulton adapted the training materials from those previously used for outbreak response training programs in Azerbaijan and the Central Asian Republics. This national level training was attended by 22 participants including four Master Trainers who previously participated in a STOP AI Training of Trainers (TOT) course and conducted Biosecurity Cascade trainings within other

regions of Georgia. The training in Tbilisi was led by STOP AI Technical Trainer, Dr. Andrea Miles, and STOP AI Training Facilitator, Maura Fulton and supported through logistics coordination and translation by the Georgian Institute for Public Administration/Georgian Rural Development Program (GIPA/GRDP).

In teams of two, Drs. Ketevan Tsiklauri, Lena Ninidze, Jimsher Osaiashvili, and Maria Gelashvili, the four Master Trainers, had the opportunity to conduct shadowed cascade trainings of the *Outbreak Response* course within other regions of Georgia and to receive coaching, feedback, and technical support from STOP AI's Technical Trainer or Training Facilitator. Dr. Andrea Miles shadowed two of the cascade trainings delivered by the Master Trainers: Kutaisi from September 16th to 18th and Tellavi from September 22nd to 24th. In Bazzaleti, Maura Fulton shadowed the Master Trainers as they delivered a third cascade training from September 16th to 18th. A total of 65 participants attended the cascade training at the three different locations in the regions. Additional regional trainings will be conducted in the remaining regions by the Master Trainers, with support by STOP AI's in-country implementing partner, GIPA/GRDP. The training targets veterinarians, health professionals, emergency response personnel, and farmers.

LATIN AMERICA AND CARIBBEAN

3.1.12 BOLIVIA

Avian Influenza Field Simulation. In August 2009, STOP AI collaborated with Bolivian and international organizations to support the delivery of an AI Outbreak Field Simulation in Cochabamba, Bolivia. International agencies in attendance included, USAID, APHIS-USDA, FAO, Inter-American Institute for Cooperation on Agriculture (IICA). Local organizations included: PRONESA (Avian Health Program), SENASAG (Agricultural Services Ministry of Agricultures), AMEVEA (Poultry Veterinarians Association), ABA (Bolivian Poultry Association), University San Simon of Cochabamba, Bolivian Police and Bolivian Army. Observers came from Ministries of Agriculture of neighbor countries (Chile, Paraguay, Argentina, Uruguay, and Brazil). STOP AI assistance came in the form of a financial contribution for personnel mobilization, partial PPE supplies, and the technical support of animal and human health experts. The 4-day field exercise engaged integrated responses from the senior animal health authorities and field response teams on an outbreak situation including elements of industrial poultry, backyard poultry, wild life, laboratory, logistics, communications, and occupational safety. About 140 people were actively involved in the exercise. The implementation of the exercise was considered successful and implied a high value to the MERCOSUR area as Bolivia was the only country in the Andean region that had not yet performed a field exercise. The national committee for AI and pandemic response is coordinating the evaluation activities, lead by the SENACSA poultry program. It is expected that modifications will be introduced into the national and regional plans based on the ongoing results reported by the different participants.

Additionally, STOP AI is working to conduct joint MOH / MOA surveillance and response capacity building activities. Training is on topics of surveillance and control of avian influenza, clinical management of cases, respiratory infection control, pharmaceutical and non-pharmaceutical interventions for influenza, health monitoring during influenza outbreaks, AI outbreak control, risk communication, and influenza pandemic preparedness and response. Training has been conducted of employees in the health, agricultural and defense sectors and others:

- 650 doctors, nurses, students, and others in the Health Sector. Trainings were conducted in the La Paz, Cochabamba and Santa Cruz Health Departments.
- 230 veterinarians, engineers, agricultural workers, and other service personnel in the agriculture sector in all nine departments of Bolivia.
- 350 police, military, and security personnel in the defense sector of the La Paz, Cochabamba and Santa Cruz Departments.

- 250 educators, professors, and students in departments of La Paz, Cochabamba, and Santa Cruz.
- 50 health services providers who implement USAID-funded projects in the departments of La Paz, Cochabamba, and Santa Cruz.
- 30 communications professionals of the health, agriculture, and defense sector in the departments of La Paz, Cochabamba, Santa Cruz, Oruro, and Tarija.
- National Police Hospitals respiratory infection control workshop held with 25 participants from La Paz, Cochabamba, and Santa Cruz.

Other workshops:

Technical Assistance. STOP AI provided technical assistance to the National Technical Committee on Avian and Pandemic Influenza (made up of representatives from The Ministries of Health, Agriculture, and Defense, and the Ministry of Education and Culture). Dr. Horacio Espinoza facilitates monthly interministerial AI committee meetings which review documents and trainings.

STOP AI also provided technical support to the National Subcommittee on Risk Communication for the formation and implementation of a national communication strategy for avian and pandemic influenza.

Laboratory Quality Assurance and Leadership Development Training. Two Laboratory Quality Assurance and Leadership Development workshops have been held thus far in Bolivia (January 2009 and September 2009) with a total of 62 participants from 8 different institutions. Two additional Laboratory Quality Assurance and Leadership Development workshops are planned for November 2009 and January 2010. The workshops are a shared activity between the Bolivian human and animal health laboratories.

3.1.13 LAC PRODUCT DEVELOPMENT MEETINGS AND TRAINING COURSES

Virtual Municipal Pandemic Planning. The Virtual Municipal Pandemic Planning (VMPP) was designed to pilot a recently developed pandemic preparedness and response toolkit in Peru. The VMPP pilot was held from June 29th to early September 2009 with five participating municipalities of Comas, José Crespo y Castillo, Nueva Cajamarca, Jesús Nazareno, and Panao. One of these municipalities, Comas, a suburb municipality of Lima, will be a collaborative effort with USAID's H2P Project. The toolkit dissemination pilot in St. Lucia, led by PAHO, was held on July 27th to 31st.

Included in the program were guidance and tools to project an estimate of the number of cases and deaths in a pandemic, to allocate scarce resources to meet local health and food security needs, to use non-pharmaceutical interventions to mitigate pandemic impacts, to continue local government and private sector essential functions, and for recovery of livelihoods.

STOP AI adapted a virtual platform successfully used by Management Sciences for Health (MSH) for leadership development and strategic planning programs. The toolkit was divided into 6 distinct modules and each module was administered over a period of one to two weeks. Fifty-six participants grouped as the five municipal teams met as a group once during each module to review the content and work on assignments. Trained facilitators worked with the municipal teams through a virtual chat room and a forum, providing technical assistance as needed, reviewing homework assignments, and motivating and maintaining engagement of all participants in the process. Through the virtual dissemination model, STOP AI was able to reach municipal-level planning teams in isolated areas in Peru. As a result of this program, municipal-level plans will be developed in 5 municipalities in diverse locations in Peru that fill gaps in pandemic preparedness and response planning. The results of this effort

will support dissemination to other countries with challenging geography. The next steps are to adapt the VMPP into a program that will train participants on the use of each tool and then conduct it across various countries regionally.

Comments from the participants included:

> *"Thank you very much for this vitally important virtual course. It helped me to strengthen my knowledge base as a municipal official, and provides simple tools which will allow us respond to and limit the spread of the pandemic in our communities."* Nueva Cajamarca, Sept 19 2009
>
> *"The VPMP is helpful for municipal pandemic preparedness. It has allowed us to identify our current situation [and] our capacity to response to a pandemic. Concepts and approaches on planning, organization, prevention, etc. have been reinforced."* Nueva Cajamarca, Sept. 17, 2009
>
> *"The virtual program was a very positive experience for our team. We have had many outbreaks of leprosy, dengue, and yellow fever but without the technical assistance that we now have for influenza. The step by step process it is a model of intervention that will help us with other epidemics as well."* José Crespo y Castillo, Sept. 16, 209
>
> *"The tools are very well designed and practical."* Nueva Cajamarca, Sept 12

Food and Livelihood Security. STOP AI continues to coordinate with TANGO International and to research Emergency Food Products and alternative in-country food manufacturing operations. The alternative emergency food production study work, planned for El Salvador during the second quarter of 2009, was postponed due to H1N1 concerns.

STOP AI worked with LAC partner's TANGO International and USAID's Food for Peace Office, focusing on Food and Livelihood Security (F/LS) Tool development for the LAC Partner Toolkit and the in-country manufacturing of FFP Emergency Food Products (EFPs) respectively.

STOP AI team members worked directly with TANGO International in the technical design and structural makeup of the six Food and Livelihood Security tools, initially basing these needs on appropriate pandemic assessment, preparedness, response, and recovery tools on SPHERE project minimum standards for humanitarian assistance during disaster. STOP AI further worked with TANGO representatives to integrate all Food and Livelihood Security pandemic response tools into the overall LAC Partner Toolkit structure for municipal leadership use. As a result of this effort, culminating in the English and Spanish language pilots of the toolkit in summer 2009, a fully merged and seamless, health, Food and Livelihood Security, risk communications, and disaster management toolkit is in the process of final clearance for use during municipal pandemic training and simulation in the coming months.

Regarding ongoing research pertaining to the in-country manufacturing of FFP Emergency Food Products (EFPs), STOP AI has worked directly with FFP Emergency Food Products, USAID Washington, USAID missions, World Food Program representatives, FANTA contractors, and host country governmental and non-governmental officials in both Peru and El Salvador. The focus of this work revolves around the strategy that with effective planning, preparation and response coordination in the face of pandemic, local food manufacturing and distribution companies working in AI Partner target countries could manufacture ready-to-eat high nutritional value EFPs as a means of sustaining food-insecure populations during the early recovery phases of a pandemic.

Initially directed by USAID Peru to study Peru's food assistance programs in order to gain an understanding of the food and nutrition security landscape within the country, STOP AI conducted extensive in-country interviews and

meetings. These included working with the Nutritional Investigation Institute (IIN), General Directorate for Food Certification (DIGESA), and the National Center for Food and Nutrition (CENAN), among others. Through this process, STOP AI came to the understanding that the National Civil Defense Institute (INDECI) was ultimately responsible for food aid type programs in Peru while the National Program for Food Assistance (PRONAA) was responsible for food assistance type programs. Likewise, in El Salvador, STOP AI was directed by WFP representatives to meet with the Ministry of Health (MSPAS) Office of Nutrition to gain an initial understanding of the food and nutrition security landscape there. From this series of meetings STOP AI came to understand that the National Emergency Committee (COEN), spearheaded by the Civil Protection Agency (Proteccion Civil), was ultimately responsible for emergency food aid import and / or distribution logistics in El Salvador, and that both the MSPAS Office of Nutrition and the National Secretariat for the Family (La Inclusion) were responsible for facilitation of food assistance programs in El Salvador such as the present day Proti-Plus food supplement production. Interestingly, unlike in Peru, La Inclusion of El Salvador is also responsible for the procurement, stockpiling and storage of emergency food aid as well with warehousing dispersed throughout the country. Finally, in both countries STOP AI came to discern the process for how to execute humanitarian food assistance / aid waivers for local manufacturing.

The full results and analysis of this STOP AI Food and Livelihood Security research will be detailed in the final EFP alternative manufacturing study report to be submitted after completion of both Peru and El Salvador specific, production pricing research still being conducted by the private sector. Regarding same, the small processed food manufacturing company, AXIS International which presently holds the meals ready-to-eat (MRE) and food supplement contract for the Peruvian military, has committed to run a trial production of the Food for Peace EFP products in Peru at its own expense as a means for establishing per unit and per ton production costs. A similar offer has been made by Solaris Laboratories in El Salvador. As the WFP has set a price point of $1,500 per metric ton as the cost of their present food aid purchases, if either Axis or Solaris is able to make FFP EFPs at this price level, the WFP would seek for the first time in the LAC region to buy its food aid products within the country / region instead of importing from abroad.

PDD Health Toolkit/Pandemic Planning. USAID convened a set of partners in the spring of 2008 to develop a pandemic preparedness toolkit for the Latin America and Caribbean region. While most countries in the region have existing national level plans, these plans are typically strategic guidance documents and developed by the health sector. The toolkit was developed to address the need for operational, multi-sector plans at the municipal level. The partners included STOP AI, the Pan American Health Organization, LinksMedia, and Tango International. Through a collaborative effort, a tool developed by the Humanitarian Pandemic Preparedness project (H2P) was also included in this toolkit.

The LAC toolkit, named *Leadership During a Pandemic: What Your Municipality Can Do*, was approved by USAID in October, 2009. It is designed to be relevant and user friendly, and create realistic and operational plans to reduce deaths from a severe pandemic. The toolkit includes 20 guidance documents and tools for disaster management, health, food security, communications, and recovery preparedness and response. The target audience is municipal mayors and their multi-sector leadership teams. The tools have undergone technical expert review, USAID review, and, finally, pilot testing in three countries. The tool evaluations and qualitative input from the pilot phase have been incorporated into tool revisions.

STOP AI contributed six tools:

Presentation on the Threat of a Severe Influenza Pandemic. This tool is especially useful for those who do not yet know much about pandemic influenza or its potentially wide-ranging effects on communities. It is a learning guide prepared using PowerPoint presentation software, intended for training the people who will be responsible for planning and response, so that they know what to expect from a pandemic scenario.

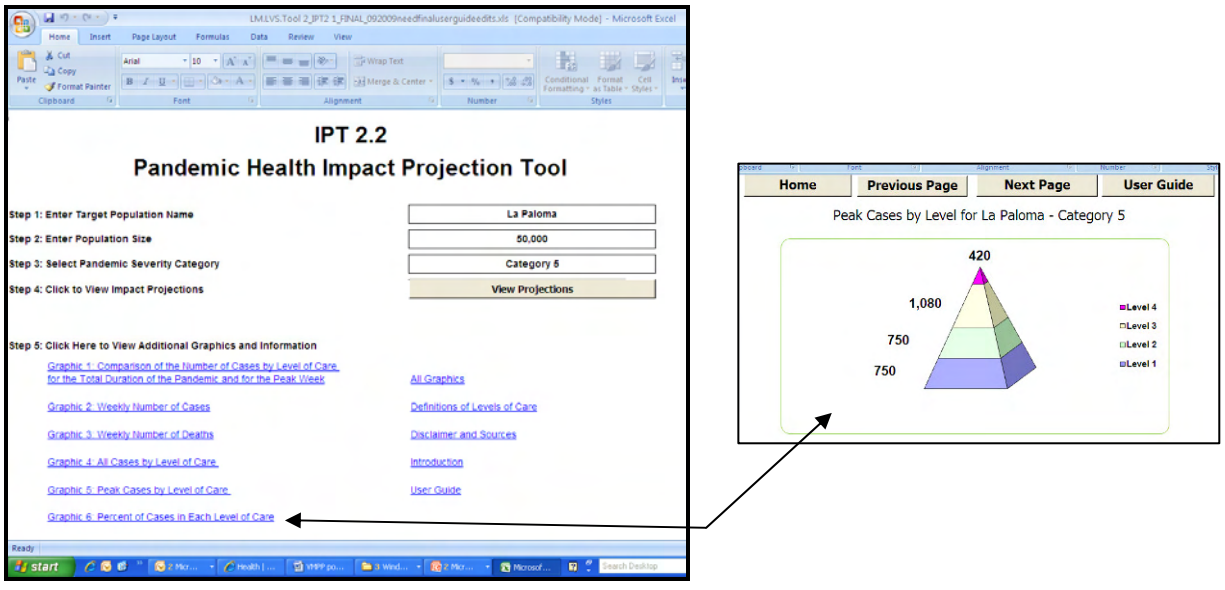
Pandemic Health Impact Projection Tool. This step-by-step electronic tool will help municipalities to use health care resources wisely to achieve the best possible outcome, the greatest number of lives saved, during a pandemic. It uses Microsoft Excel spreadsheet software. By entering three characteristics of a municipality, the tool can be used to generate estimates of the number of cases and the number of deaths expected during each week of the outbreak. The tool categorizes the expected cases into the four different levels of care that the people in a municipality are expected to need.

Non-Pharmaceutical Interventions: Actions to Limit the Spread of the Pandemic in Your Municipality. This tool explains the approaches available to limit the spread of the illness and explains how and when to implement them. Pharmaceutical interventions involve vaccines and antiviral medications to prevent and treat the disease or its complications. Because it will not be possible to manufacture vaccines for the initial pandemic wave, and certain barriers will prevent the use of antiviral medications, most countries will need to protect their populations without either of these interventions. This tool describes non-pharmaceutical interventions, such as social distancing, that municipalities can use to try to limit the spread of the disease.

Triage: Prioritizing Care to Reduce Deaths. This tool explains the importance of triage during a pandemic and how it differs from triage as commonly practiced under normal conditions. A pandemic or other catastrophic disaster will result in large numbers of sick or injured people who will overwhelm a community's health resources. Municipal leaders will be charged with developing policies and standards for the care of the sick and dying at a time when resources may not be sufficient to provide care for all those who need help. Using limited resources ineffectively could result in the preventable loss of yet more lives. But, by planning in advance how to prioritize the use of scarce health resources during a pandemic, municipalities can help ensure that care is provided to those who need it and will benefit from it most.

Disaster Management in a Pandemic. While general disaster response capabilities will be needed during the pandemic, the complexities of the pandemic require a unique response. This tool will assists in planning and implementing the coordinated multi-sector response that will be needed, and will help municipalities to lead an effective response in order to reduce deaths during the pandemic.

Maintenance of Essential Services. During the pandemic, workforce shortages and supply chain disruptions, along with social distancing, require some businesses to close or reduce their operations. Further, municipal government officials may need to rethink how they provide essential goods and services. This tool takes officials through each of the steps necessary for creating a plan to ensure the continuity, to the extent possible, of normal municipal activities in each sector. Planning is currently underway to offer a series of toolkit trainings using both in-country and virtual programs.



3.1.14 NICARAGUA

Municipal Level Pandemic Planning and Risk Assessment. The government of Nicaragua officially promotes decentralized planning and administration of all government services to the municipalities. A municipality is the lowest administrative unit and may contain multiple communities. STOP AI was asked to support the Ministry of Health (MINSA) to develop a model for municipal level planning for health services in the event of a pandemic, and to assess the relative risk of each municipality for vulnerability to a pandemic.

STOP AI hired two full-time staff members to work out of the MSH Nicaragua office, which is located on the grounds of the MINSA, to work directly with MINSA staff at central, department and municipal levels to develop the tools. A guide to municipal level pandemic preparedness and response was developed with support from STOP AI technical staff. The guide contains 15 chapters, templates, and guidelines to support municipal level teams to develop their own pandemic preparedness plan. A key tool within the guide is an impact projection tool, which allows each municipality to estimate the number of deaths and the number of ill people by category for each level of potential pandemic severity. This is an adaptation of the CDC Flu Surge model developed for the USA but adjusted for the realities faced in Nicaragua (e.g., respirators are non-existent). This proved to be the most useful tool because it allowed planners to develop surge capacity for times when health facilities become overwhelmed with large numbers of sick and dying patients. This guide was field tested in 12 municipalities of the Department of Nuevo Segovia. The tool was adjusted based on the field test, and then expanded to other municipalities over the course of the last project year.

It was apparent that both resources and time would not permit the project to reach all municipalities in Nicaragua as originally requested, so a pandemic risk assessment tool was developed that took into account factors such as existing morbidity and mortality from acute respiratory infections, socio-economic status, population density, high impact economic activities, and (for avian influenza) proximity to poultry farms. In this way, all 153 municipalities in Nicaragua were classified by high, medium or low risk for vulnerability to a pandemic of influenza, avian or human. Thus, guided by this risk assessment, we were able to train municipal level staff and implement the guide in all high and medium risk municipalities. Twenty-nine high risk municipalities also participated in a simulation of an influenza pandemic to test their local plans and capabilities to respond.

To date, 97 of the 153 municipalities have been trained in this guide and have developed their own municipal level pandemic health preparedness and response plan, and 29 high risk municipalities have held table-top simulations of that plan. One hundred and ten rapid response teams were formed and trained in the response plans at all levels—national, departmental, and local. With support from CDC and PAHO, eventually all 153 municipalities will be reached, making this the first truly national municipal level pandemic planning exercise in the world. The model has since been adapted for other countries of the region, such as Guatemala and El Salvador, and has been disseminated through regional pandemic planning conferences in Ethiopia, South Africa, and Vietnam for use in other countries.

3.2 COMPLETED COUNTRY ACTIVITIES

AFRICA

3.2.1 EAST AFRICA

Biosecurity, Surveillance, and Outbreak Response Training, Juba, Sudan. As part of STOP AI's East Africa Work Plan, STOP AI supported a series of Cascade District-Level training programs conducted by participants who attended STOP AI's HPAI Surveillance, Biosecurity, and Response Training of Trainers Workshops in Ethiopia and Tanzania. The participants from seven countries in the East Africa region: Kenya, Uganda, Rwanda, Sudan, Burundi, Tanzania, and Ethiopia, were invited to submit proposals to conduct a training program in their home countries to share the

course, content, and skills with their colleagues at the district level. From the East Africa Regional training courses, STOP AI selected five proposals for funding.

From September 23rd -27th, the fifth STOP AI Cascade District-Level training program was conducted in Juba County by STOP AI alumni trainers Dr. David S. Adwok, Dr. Jacob Korok, and Mr. Augustino Atillio. The workshop was supported by Veterinaires Sans Frontieres-Belgium (VSF-B) with accounting and reporting, as well as a $5,000 contribution from VSF-B Livestock Epidemio-Surveillance Project. The 5-day training was attended by 21 participants drawn from five counties of the Central Equatoria State including Yei, Kajikaji, Lainya, Morobo, and Juba, and included poultry farm owners, veterinarians, stockpersons, County Supervisors, community animal health workers, and extension workers.

3.2.2 SOUTHERN AFRICA

HPAI Plan Clarification of Roles Workshop. In collaboration with USAID Southern Africa and FAO, STOP AI conducted a 3-day planning workshop called "HPAI Plan Clarification of Roles." The training was conducted in Chisamba, Zambia from September 9th -11th. A total of 37 participants and trainers participated in the planning workshop. Workshop participants represented Zambian ministries and authorities who will be directly involved in the FAO outbreak response simulation exercise in late September. Based on the Zambian National HPAI Response Plan, key ministries included were the Ministry of Agriculture and Cooperatives, and the Ministry of Health. Other stakeholders included the Ministry of Information and Broadcasting Services, and the Poultry Association of Zambia.

The overall objective of the 3-day planning workshop in Zambia was to provide an opportunity for the Rapid Response Team (RRT) of the Central Province and other national level and provincial level stakeholders to prepare for the FAO field simulation exercise to be held September 29th and 30th in Chisamba, Zambia.

The planning session resulted in the development of detailed plans and clarifications of roles and responsibilities for five separate teams who will be coordinating and implementing the FAO Simulation Exercise. The teams included: Crisis Management Team, Veterinary Team, Human Health Team, Security/Biosecurity Team, and Communications Team. These teams will play a critical role in the implementation of the FAO simulation exercise. The HPAI Plan Clarification Workshop and the FAO Simulation Exercise will be followed by a Rapid Response Team (RRT) training designed and conducted by USAID Southern Africa, Centers for Disease Control and Prevention (CDC), and STOP AI in November 2009.

STOP AI is planning for the RRT training scheduled for November 2nd – 6th, 2009 in Kabwe, Zambia. Coordination with USAID Southern Africa and CDC representatives in South Africa and Lusaka continues to design the training course and to integrate animal and human health materials for use during the workshop.

LATIN AMERICAN AND CARIBBEAN

3.2.1 CARIBBEAN

Scope of Work Development. STOP AI revised the Caribbean SOW for project activities in Jamaica and resubmitted the SOW to the API Unit on July 6th, 2009. STOP AI's activities in Jamaica will focus on four areas of capacity development including leadership awareness and sensitization; developing stronger pandemic preparedness and response stakeholder coordination; greater parish to municipal-level-pandemic preparedness and response capacity; and review and discussion of Emergency Food Product Options. STOP AI plans to conduct integrated pandemic preparedness planning, training, and simulations (January – March) as well as "Central-To-Parish" level pandemic preparedness and responses planning and exercises (April – June). Activities are planned to start on or about January 1, 2010 and to conclude in July 2010.

3.2.2 EL SALVADOR

Municipal Toolkit. STOP AI's planned activities of Municipal Toolkit and municipal planning work for May have been postponed due to H1N1 concerns. Drs. Carlos Saenz and Julio Ortega will work with the Ministry of Health and other agencies to continue the implementation of the municipal toolkit in El Salvador.

Joint Human-Animal Health Training and Simulations for Avian Influenza. El Salvador has significant experience in dealing with low pathogenic avian influenza, H5N2, in the past. Because of this experience, veterinary surveillance and rapid response teams are very well developed in El Salvador. However, as H5N2 does not affect humans, joint efforts implemented between the Ministry of Agriculture and the Ministry of Health were not previously conducted. Likewise, while the Ministry of Health has implemented surveillance for influenza-like illness and established human health epidemiological rapid response teams, no joint efforts with the MOA have been implemented for surveillance and rapid response teams for a zoonotic disease such as highly pathogenic avian influenza (HPAI)—H5N1. During an assessment visit in February of 2008, both the MOH and the MOA requested joint training and simulations for a potential HPAI outbreak with human cases. STOP AI agreed to support this request.

A joint task force of the MOH and the MOA was formed to plan, implement, and evaluate the training and simulations. Representatives from the Ministries of Education, Defense, Civil Protection, and Institute of Social Security also participated in the planning and implementation of these activities. A second follow-up visit by a STOP AI assessment team consisting of both human health and veterinary experts produced a draft agenda and curriculum for the training and simulations. Stakeholders agreed to conduct a 5-day joint MOH and MOA training, modeled after the successful STOP AI joint animal-human health training program developed and field tested in 2007. In the training design, STOP AI planned a table-top simulation of an HPAI outbreak with multiple suspect human cases near the frontier for senior level management in both the MOH and the MOA. The field simulation of an actual outbreak at a poultry farm was conducted approximately 2 hours outside of San Salvador, near the Pacific coast. Evaluation procedures for each of the three activities were developed. As a result, the joint training table top simulation for senior executives and the field simulation of an actual HPAI outbreak were successfully implemented. There was a great deal of coverage of the two simulations by the press, both print and television. Both the MOH and the MOA declared the exercises successful, and used them to provide risk communication to the general population about prevention, detection and containment of any potential HPAI outbreak:

> Dr. Mario Serpas, the Director of Health Surveillance, MOH described the activity: "the idea is to be prepared for the moment that the alert for HPAI changes."
>
> Dr. Rafael Chacon, CDC advisor for Central America, stated, "The Americas do not yet have cases of HPAI, but this could be imported and exercises like this are important to be prepared. Our response, if needed, should not be improvised."
>
> La Prensa Grafica stated, "The simulation was a success because everybody executed well what was previously planned."

3.2.3 GUATEMALA

STOP AI's work in Guatemala focuses on improving preparedness and response to Avian Influenza and a potential pandemic. In collaboration with the Pan American Health Organization (PAHO) and the Centers for Disease Control and Prevention, the Ministry of Health of Guatemala has worked with the National coordinator for the Reduction of Disasters (CONRED) to develop a national avian influenza and pandemic preparedness and response plan. The plan has not been adequately field tested, nor has it been extended out to the local levels. All partners

involved have requested STOP AI technical assistance to extend the plan and capacity to respond down to the municipal level. In support of these objectives, STOP AI resolved to focus on two activities:

1. Decentralize AI/pandemic preparedness and response capability to the municipal level; and
2. Strengthen the capacity of the MOH hospitals in case management of suspect human AI cases.

As part of these activities, STOP AI delivered the following:

- Presentation of municipal health sector planning to the MOH;
- Presentation and development of a hospital-based training program for case management of large numbers of influenza cases and infection prevention/airborne precautions training;
- Designed Municipal Health Planning Guide for Municipalities in Guatemala;
- Adapted Risk Classification Tool to Guatemala municipalities;
- Classified 331 Guatemala municipalities according to risk classification (low, medium, high);
- Held Laboratory Quality Assurance and Leadership Development Trainings workshops held in May 2008 and June 2009.

For the quarter, two additional Laboratory Quality Assurance and Leadership Development Training works are planned for October 2009 and December 2009.

3.2.4 PARAGUAY

Avian Influenza Community Surveillance Program. STOP AI provided support to the Paraguayan Ministries of Health and Agriculture for the prevention, response, and control of avian and pandemic influenza at the national, provincial, and community levels. An assessment of the nation's preparedness was carried out in March 2008 and the following activities were conducted to fill some of the gaps identified during the assessment:

- Four sequential laboratory management, leadership and quality assurance trainings were conducted for the national veterinarian and public health laboratory staff. The workshops developed the capacity of the 31 participants with improved management and leadership skills. During the workshops, the participants assembled as teams and obtained results towards the implementation of their quality assurance systems, while keeping alignment with the mission and vision of their institutions. Quality Assurance implementation will contribute to sustainable and continuous improvement of laboratory services. These trainings are conducted sequentially over a period of one year to allow for the laboratory teams to take what they had learned and put it into practice before progressing to the next learning level. Placing animal and public health staff under the same training environment promoted the integrated model of animal health and public health working together.

Organization	Number of Teams	Number of people	Workshops completed by Oct 2009
National Public Health Lab.	2	16	4/4
SENACSA (Agriculture)	3	15	4/4
TOTAL	5	31	8/8

- Two 3-day respiratory infection control workshops were conducted in June 2009 for key infection control staff from the 24 provincial referral hospitals. Participants included 50 doctors and nurses directly involved in the infection control activities of their hospitals. Follow-up with the individual hospitals continues.

- Finally, STOP AI designed, facilitated, and then led a 2-day AI (Emerging Zoonotic) Community Surveillance TOT training in September 2009 for a combined group of 50 MOA DVMs, MOH field epidemiologists, Peace Corps Volunteers, and PLAN Paraguay community health representatives working

in six Paraguayan states. With a commitment from each TOT trainee to replicate the training no less than 15 times each. With an expected future 750 communities contacted and a 1,000 person average population per community, this first ever veterinary outbreak reporting capability program is expected to provide community level emerging zoonotic disease surveillance coverage to upwards of 750,000 Paraguayans or 8.5% of the total population of the country.

4. PROGRESS TOWARD RESULTS

4.1 NEW PROBLEMS ENCOUNTERED AND PROPOSED SOLUTIONS

Southern Vietnam value chain approach. In implementing the Safe Local Chicken project in Vietnam, some marketing setbacks were experienced in the South, where the farmers did not agree to the initial approaches suggested. Asvelis and MDI will work together in the upcoming quarter to provide a more suitable marketing strategy for the South, but clearly, the highest priority of the next quarter is to set up the rural slaughterhouses in the South with the imported French equipment.

Temporary training delays in Sudan. The cascade trainings being undertaken in Sudan by graduates of the East Africa training, with STOP AI financial assistance, have been delayed as terms of support were being developed with Veterinaires Sans Frontieres – Belgium. These have been resolved in Southern Sudan, where the cascade training was carried out, and have been resolved in Northern Sudan, which will have its cascade training next quarter.

Bangladesh bank account. Opening a bank account in Bangladesh, which has been an exceedingly difficult process over the life of the project, has been resolved this quarter and STOP AI has received confirmation that its documentation is on order and a bank account will be opened soon. Initial attempts to open an account with Standard Charter and Citibank were unsuccessful after STOP AI's presentation of numerous documents. We were able to open an account with HSBC, which will ease financial management and operations. We resolved the issues in August, and will wire money into the account early next quarter.

H1N1 outbreaks in LAC. Continued focus responding to the A/H1N1 pandemic in some of our countries of operation in Latin America, most notably El Salvador, Guatemala, has slowed STOP AI programming in the region. We are working with counterparts and USAID points of contact in the region and believe that the training and tools provided by STOP AI are of particularly great value to these countries in responding to the pandemic at the municipal level.

4.2. UPDATE ON RESOLUTION OF ISSUES RAISED IN PREVIOUS REPORTS

As noted in our last quarterly report, we resolved the issues in Bangladesh with the Karcher sprayers and addressed the concerns about the Ukraine training. Feedback received since the report from both countries from stakeholders confirmed that our resolutions were effective.

The other issue cited—the postponement and delays in LAC caused by H1N1—continues. As demonstrated in 3.2.1 to 3.2.4 in this report, we are continuing to make progress on key HPAI material for the Caribbean, El Salvador, Guatemala, and Paraguay. We will continue to address our approach to these delays in future quarterly reports.

4.3 ANTICIPATED ACTIVITIES PLANNED FOR NEXT QUARTER

STOP AI has the following activities planned:

Africa

- Nigeria: Visits to live bird markets
- East Africa: Cascade training
- Southern Africa: Rapid Response Team training
- Uganda: Preparation of a District-Level Action Planning Final Report; table-top simulation
- West Africa: Regional Biosecurity in Live Bird Market training; third laboratory capacity workshop; human health curriculum development with AFENET and the University of Accra

ANE

- Bangladesh: Continued PPP and cleaning and disinfection activities
- Egypt: Strengthening Avian Influenza Detection and Response workshop; stakeholder roundtable workshops; Outbreak Response training
- Nepal: Continued support to be determined
- Vietnam: Continued work on supply chains

E&E

- CAR: Poultry Industry training; rayon-level Outbreak Response Plan design
- Georgia: Potential continued cascade training

LAC

- Bolivia: Third Laboratory Quality Assurance/Leadership Development training
- Caribbean: Parish-level workshops
- Guatemala: third Laboratory Quality Assurance/Leadership Development training
- Nicaragua: COMUPRED simulation
- Paraguay: Potential Infection Control follow-up visits

4.4 PROGRESS TOWARDS RESULTS

As detailed in sections 1 through 3 of this report, STOP AI made significant progress delivering on its country and global activities. For the quarter, STOP AI conducted $2.25 million worth of work. We anticipate that next quarter's expenditures will be $2.7 million.

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