#### INTERAGENCY AGREEMENT BETWEEN THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT AND THE CENTERS FOR DISEASE CONTROL AND PREVENTION

1. Project Title: Infectious Disease Results Package		2. Project Number: 936-3100 Phoenix/NMS#: Award Number: GHN-T-00-06-00001			
3. Resource Code: 4100800		4. Activity Name: CDC IAA			
5. Fund Account/Symbol (see page 2)		6. Fisca	al Year: 2007		
7. Completion Date: September 30, 2011		8. Orig	8. Originalor Amendment No		
9A. Prior Funding     9B. Funding       \$16,648,199     \$1,977,104		Obligated	l this Document	9C. New Total Funding \$18,625,303	
10. Authority: Section 632(b) of the For	eign Assistanc	e Act of 2	1961, as amended.		
11. The purpose of this amendment is to mod funding for this agreement in the amount of \$		teragency	agreement with CDC to pro	ovide field support	
12. Liaison Offices/Additional Represent	tatives				
<ul> <li>A. Centers for Disease Control and Prevention Michelle Copeland (404) 639-3189</li> </ul>		<ul><li>B. U.S. Agency for International Development Emily Wainwright (202) 712-4569</li></ul>			
13A. Signature by Authorized Representative:		13B. Sig	nature by Authorized Re	epresentative:	
CENTERS FOR DISEASE CONTROL AND PREVENTION		U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT			
BY:		BY: _			
NAME: Dr. Stephen Blount, MD		NAME:	Gloria D. Steele		
TITLE: Director Office of Global Health Office of the Director		TITLE:	Senior Deputy Assista Bureau for Global Hea		
DATE:		DATE:			
<ul> <li>14. This Interagency Agreement consists of this face she</li> <li><u>_</u> Revised Schedule</li> <li><u>X</u> Annex B - Revised Financial Plan and Budget</li> </ul>			e following items (if che Annex A – Program Des Annex C - Standard Prov	scription	

#### ACCOUNTING AND APPROPRIATION DATA SHEET IAA with the Centers for Disease Control and Prevention Award No. GHN-T-00-06-00001-02

- A. <u>GENERAL</u>
- 1. Total Estimated Cost:
- 2. Total Amount Obligated prior to Action:
- 3. Total Amount Obligated this Action:
- 4. Total Amount Obligated
- 5. Project Number:
- 6. USAID Project Officer:

- \$ 100,000,000 \$ 16,648,199 \$ 1,977,104 \$ 18,625,303 936-3100 Angela Weaver GH/HIDN/MCH
- 3.07-027, 3rd Floor, RRB Washington, DC 20523-3700

- B. <u>SPECIFIC</u>
- 1. NMS/Phoenix Request Number:
- 2. Organizational Symbol:
- 3. Resource Category Code:
- 4. Activity Name:
- 5. Fund Account/ Allotment Symbols:

#### 000001997 GH/HIDN/ID 4100800 Umbrella CDC IAA

Field Support Funds	
FS / 07GH-AFR-GHN-T-00-06-00001	<b>\$610,000</b>
FS / 07GH-AFR-GHN-T-00-06-00001.A	<mark>\$388,000</mark>
FS / 07GH-AFR-GHN-T-00-06-00001.B	\$265,000
FS / 07GH-DCHOF-GHN-T-00-06-00001.A	<mark>\$35,000</mark>
FS / 07GH-DCHOF-GHN-T-00-06-00001.B	<mark>\$184,492</mark>

6. Total Obligation Amount:

\$ 1,977,104

Page 2 of 2

#### ACTION MEMORANDUM

TO: SDAA/GH, Gloria D. Steele

FROM: GH/HIDN, Richard Greene

SUBJECT: Amendment 2 of Interagency Agreement (IAA) No. GHN-T-00-06-00001, between USAID and the Centers for Disease Control and Prevention (CDC), under the Infectious Disease Activity Approval Document (ID AAD) 936-3100

#### Recommendation

That you:

• Approve an amendment to the subject IAA to provide incremental funding to this agreement in the amount of \$3,678,168 in field support and MAARDs funds committed to Global Health for obligation.

#### Background

In 2006, the Office of Health, Infectious Diseases and Nutrition (HIDN) entered into a new Interagency Agreement with the CDC to provide appropriate and responsive technical assistance in the analysis, planning, development, and evaluation of many disease control, research, and health service delivery activities that are supported by HIDN, USAID missions, and regional bureaus.

This flexible mechanism allows USAID access to CDC's internationally recognized expertise in order to:

- Carry out collaborative activities in support of project development, monitoring, and evaluation of host country health activities, and
- Conduct studies, assessments, evaluations, and other research activities at the request of USAID to assist in planning and formulating its health programs and otherwise assist it in implementing USAID strategic objectives.

Some major accomplishments since the implementation of this agreement includes the following

- In country technical advisors have been placed in four PMI countries and are responsible for the implementation of all PMI interventions and establishing plans for monitoring and evaluation of the PMI.
- Collaboration with the Thailand Ministry of Public Health on an *Observational study of HIV-infected TB patients in Thailand* to determine risk factors and causes of death among HIV-infected TB patients in Thailand.
- Detailed epidemiological and program monitoring data has been collected for approximately 3000 patients in the active TB surveillance Network in Thailand. Analyses are being used to inform the Ministry of Public Health TB control policies, including examining the impact of directly observed therapy on all patients and barriers to HIV counseling and testing in TB patients.
- *Training of TB control staff in Thailand.* With USAID support, CDC continues to conduct ongoing training of healthcare staff at the national, provincial, and district level in various aspects of TB control, including: recording, reporting, monitoring, and evaluating TB program performance; management of TB, TB/HIV, and MDR-TB; and HIV counseling and testing. Training sessions have been conducted using local and national health officials, rather than international experts, to build capacity for ongoing technical assistance and support.
- Provided laboratory training and technical assistance to microbiologists from Brazil, Chile, Kenya, Thailand, Trinidad, Mozambique, Nepal, and India. Provided laboratory consultation for South Africa, Kenya, Ethiopia, Israel, Australia, Sweden, Hungary Belgium, the Netherlands, and United Kingdom. Provided epidemiologic assistance to public health and research staff in Kenya, Mozambique, and South Africa.

The total estimated cost of this IAA is \$100,000,000. Total amount obligated to date is \$12,970,031. The amount to be obligated with this action is \$3,678,168 in field support. The total amount now obligated to this IAA is \$16,648,199.

USAID is providing incremental funding to CDC for the following activities:

- USAID/OFDA \$35,000 will be used to purchase vaccines and provide technical assistance for a recent outbreak of Rift Valley Fever in humans and animals in Kenya;
- USAID/OFDA \$184,492 will be used for establishing and maintaining diagnostic virology services in the Central Veterinary Services lab in Kabete, Kenya;

• USAID/Malawi - \$265,000 will be used for technical assistance for President's Malaria Initiative (PMI) activities in Malawi;

• USAID/Mozambique - \$388,000 will be used for technical assistance for PMI activities in Mozambique;

• USAID/Tanzania - \$610,000 will be used for technical assistance for PMI activities;

• USAID/Pakistan - \$1,783,676 will be used to provide additional funding for the Field Epidemiology and Laboratory Training Program (FELTP), and

• USAID/Guatemala - \$412,000 will be used to partially fund a Maternal and Child Health National Survey in Guatemala.

<u>Authority</u>: Pursuant to the GH Delegations of Authority under ADS Section 103.3.16.1, paragraph g, the Senior Deputy Assistant Administrator has the authority to negotiate, execute, and amend 632(b) interagency agreements.

By signing the attached original face sheets (Tab A) you approve an additional \$3,678,168 in field support and MAARD funding committed to Global Health for obligation in the CDC IAA Amendment 2.

Attachments:

Tab A: IAA Face Sheet (5 Originals) Tab B: Annex A: Program Description Tab C: Annex B: FY 07 Financial Plan and Budget CLEARANCE PAGE FOR ACTION MEMORANDUM requesting a decision on Amendment # 2 of the CDC IAA.

GH/HIDN/ID, IKoek/s/Date 3/21/09	
GH/HIDN, EFox/s/Date 4/5/07	
GH/HIDN, JIce/s/Date 4/4/07	
GH/GC, CRyder Not Required – incremental funding	
GH/SPBO, LWhite	_Date
GH/SPBO, KHilliard	_Date

P:\GH.SHARED\HIDN Program Staff docs & guidance\Scott Torres\2006 CDC IAA\Amendment 2\CDC IAA Umbrella Amendment

#### ANNEX B REVISED FINANCIAL PLAN AND BUDGET Umbrella IAA between USAID and CDC

Below is a summary of the budget for each component by directive and implementing unit within CDC to be funded under this amendment in FY 07.

Component (by funding source)	<b>Implementing Unit</b>	Budget (\$)
USAID/OFDA	NCPDCID/DEISS	35,000
USAID/OFDA	NCZVED/DVRD	184,492
USAID/Malawi—PMI	NCZVED/DPD/MB	265,000
USAID/Mozambique—PMI	NCZVED/DPD/MB	388,000
USAID/Tanzania—PMI	NCZVED/DPD/MB	610,000
USAID/Pakistan (MAARD)	COGH/DESCD	1,783,676
USAID/Guatemala (MAARD)	CDC/MERTU	412,000
	TOTAL:	\$ 3,678,168

### Annex A: Program Description

Section I:	Other Bureau Funds	
	OFDA—Kenya	page 2
	OFDA—Kenya	
Section II:	Field Support	
	Malawi	page 5
	Mozambique	page 6
	Tanzania	page 8
Section III:	MAARDS	
	Pakistan	page 9
	Guatemala	

Country/Region: Kenya Title Describing the Activity: Rift Valley Fever in Kenya Center/Division and Project Officer at CDC the activity was negotiated with: NCPDCID/DEISS, Ray R. Arthur, Associate Director for Global Health (Atlanta) and Robert Breiman (Nairobi) Bureau or Mission contact following the activity: Laura Powers, USAID/DCHA/OFDA or Mary Beth Brennan, USAID/DCHA/OFDA and Michael Strong USAID/KENYA/OPH Amount, type and year of funds to be obligated: \$35,000 (OFDA funds transfer) Time Frame if appropriate: immediate response

#### SCOPE OF WORK

The rains recent in northern Kenya have led to an outbreak of Rift Valley Fever in humans and animals. USAID requests that the Center for Disease Control (CDC) use these emergency funds for animal vaccine procurement and technical assistance.

#### **BUDGET**

Total <u>\$35,000.00</u>

Country/Region: Kenya Title Describing the Activity: Establishing and Maintaining Diagnostic Virology Services in the Central Veterinary Services Lab in Kabete, Kenya Center/Division and Project Officer at CDC the activity was negotiated with: Ray R. Arthur, NCZVED/DVRD and Robert Breiman, CDC-KEMRI (Nairobi) Bureau or Mission contact following the activity: Laura Powers, USAID/DCHA/OFDA or Mary Beth Brennan, USAID/DCHA/OFDA Amount, type and year of funds to be obligated: \$184,492 Time Frame if appropriate: 2007

#### **BACKGROUND**

During the past three weeks, the CDC Special Pathogens Branch (SPB) has set up a high throughput Rift Valley fever (RVF) diagnostic lab at the Central Veterinary Services laboratory at Kabete (Ministry of Livestock and Fisheries Development-MOLFD). Modifications of both the physical set up and SOPs were put in place, and all the necessary equipment was installed to facilitate testing. The team spent three weeks training Kabete staff to efficiently access specimens, operate a central specimen and results database, run assays, and use electronic reporting systems. At the end of the training, the lab was capable of running IgG, IgM, and Antigen Capture ELISA assays, and real time RT-PCR on cattle, sheep, and goat specimens. The Kabete team (consisting of 6-7 technicians) can now simultaneously run approx. 100 IgG, IgM and Antigen Capture assays per day. In addition, they can simultaneously run approx. 50-60 real time RT-PCR assays per day. As team experience increases, this throughput should approximately double. This provides the lab with the ability to quickly and efficiently run general livestock serosurveys (IgG and IgM assays) as well as acute diagnosis (IgM, Antigen Capture and real time RT-PCR) for RVF. All the necessary equipment has been left in place and sufficient reagents to continue testing until the end of the year are being provided by SPB.

#### SCOPE OF WORK

SPB has committed to support the Kabete lab indefinitely with the RVF-specific reagents (virus antigens and antibodies necessary for the ELISA tests and primers and probes needed for the real time RT-PCR assays) free of charge. Therefore, funds for consumables including plasticware, tips, buffers, commercial reagents are included in the proposed budget. The budget also reflects sufficient materials to test approx. 4000 specimens between now and the end of the year. The budget also includes the cost of a follow-up visit by two SPB staff members in approx. 6 months time to check on progress and testing quality assurance. The equipment and testing regimens put in place for RVF are the same as those in place for human testing at the CDC Kenya lab at KEMRI, and are identical to those that would be used for future Avian Influenza testing. These features should help insure the sustainability of the Kabete laboratory testing capability.

CDC-Kenya will provide continuous support for the Kabete lab in quality assurance/quality control. CDC-Kenya will test a proportion of positive and negative specimens.

MoLFD has agreed in the past to test specimens from animals from other countries in the region for avian influenza and most recently for Rift Valley fever. CDC will continue to encourage Kabete labs to play this regional role.

#### **BUDGET**

Supplies	Extraction Supplies, ELISA Reagents	\$7,000.00	4	\$28,000.00		For detection assays	
	PCR Reagents	\$8,000.00	4	\$32,000.00		For detection assays	
	Labels	\$600	1	600		Label specimens	
	Label View software	\$1,000	1	1000		Label specimens	
	Gowns/case	\$300.00	5	\$1,500.00		For detection assays	
	Gloves/case	\$100.00	8	\$800.00		For detection assays	
	Scrubs/ea	\$25.00	50	\$1,250.00		For detection assays	
	Tubes, eppendorff tips,multi-channel pipettes	\$6,000.00	2	\$12,000.00	A	For detection assays	
Subtotal					\$77,150. 00		
Lab Equipment	Jouane Centrifuge for clinical specimens, with rotors, etc	\$8,500	1	8500		Need centrifuge with safety rotors	
	ELISA reader	\$5,200	1	5200			
	EIA washer BioTek	\$11,500	1	11500		We need to have this EIA apparatu in the diagnostic laboratory	
	Computer for Lab	\$2,400	2	4800		Specimen accessioning; ELISA and RT-PCR results output in lab	
	Thermal label printer for lab	\$850	1	850		To Label specimens	
	ABI 6100 prep station	\$13,000	1	13000		To support diagnostic laboratory	
	Tissue grinder	\$10,000	1	10000		To support diagnostic laboratory	
	Eppendorf PCR machine	\$6,500	1	6500		To support diagnostic laboratory	
	ABI 7500 Real Time PCR machine	\$39,000	1	39000		To support diagnostic laboratory	
	Table top centrifuge	\$7,677	1	7677		To support diagnostic laboratory	
Subtotal	Vortex mixer	\$315	1	315	\$107,342 .00	To support diagnostic laboratory	
Total (equipment at Kabete	and reagents only) for initial setup of high-throughput virus	diagnostic lab			\$184,492 .00		

Country/Region: Malawi Title Describing the Activity: Funding for CDC staff, technical assistance for early PMI activities Center/Division and Project Officer at CDC the activity was negotiated with: Tavari Taylor, NCZVED/DPD/MB Bureau or Mission contact following the activity: Catherine Chiphazi, USAID/Malawi Mission Amount, type and year of funds to be obligated: \$265,000 Time frame, if appropriate:

1. Funding to provide a) direct support to the assigned CDC Senior Public Health Advisor, Director of CDC Malaria Programme Malawi, and b) CDC Technical assistance and Malawi program staff. These funds will be used for the costs associated with salary, benefits, IAA costs, and other administrative support. Sub-total: \$150,000

2. Funding for the immediate requirements involving early implementation of the Malawi PMI Malaria Operational Plan for monitoring and evaluation activities including a) the indicators survey with biomarker (anaemia and parasetemia) data at household and health facility levels (\$85,000), and the pre-ACT implementation Health facility survey (\$30,000). These will be facilitated via the existing CDC Cooperative Agreement (CoAg) with The College of Medicine, Malaria Alert Centre, Malawi plus applicable overhead costs and a CDC Cooperative Agreement (CoAg) to be developed with the Ministry of Health, National Malaria Control Programme, Malawi.

Sub-total: \$115,000

Total: \$265,000

Country/Region: Mozambique Title Describing the Activity: Funding for CDC staff Center/Division and Project Officer at CDC the activity was negotiated with: David Gittelman, NCZVED/DPD/MB Bureau or Mission contact following the activity: Abu Saifodine, USAID/Mozambique Amount, type and year of funds to be obligated: \$388,000 Funds Obligated \$388,000

The Malaria Advisor/Program Manager shall provide leadership, guidance, and overall direction on the development and execution of the PMI in collaboration with the PMI USAID Malaria Advisor. The Advisor shall liaise with backstops for the PMI in CDC/Atlanta and counterparts in USAID/Washington, and USAID personnel working within and overseeing the Mission's activities related to malaria control. These responsibilities include regular contact and collaboration with the counterparts in Mozambique's National Malaria Control Program (NMCP) and other Government of the Republic of Mozambique (GRM) ministries and agencies, as well as with a wide range of civil society and private organizations, other donor and international organizations, and other USG entities working in malaria prevention and control. The Malaria Advisor/Program Manager shall exercise extensive independent judgment in planning and carrying out tasks, in representing the USG in critical technical and policy forums, in resolving problems and conflicts, and in taking steps necessary to meet deadlines. The Malaria Advisor/Program Manager will also perform inherently governmental functions such as officially representing USAID at functions; approving policy documents; managing contracts and grants; budgeting; and developing planning documents and work plans.

Specifically, the Advisor shall:

1. Collaborate with senior staff of the NMCP and other partners, such as the GFATM, WHO, UNICEF, World Bank, NGOs, and FBOs to design, plan and implement malaria prevention and control activities consistent with the malaria control coverage needs identified by the strategy and plans of the NMCP and PMI;

2. Ensure that all activities are consistent with internationally accepted best practices and relevant to the specific malaria epidemiology of Mozambique;

3. Coordinate with other partners and support efforts to address malaria control delivery gaps and help build technical and managerial capacity within the NMCP at the national, district and lower levels;

4. Provide technical support to all partners and managerial support as needed during the design and implementation of program activities to ensure the quality of interventions supported and the achievement of program targets;

5. Work with suppliers and partners to ensure that program commodities are purchased in a timely and cost-effective manner. Also, ensure that the absorptive capacity exists in implementation sites to receive, manage, and distribute these items effectively;

6. Ensure that malaria activities are integrated into overall USAID-supported health activities and coordinate these activities with the NMCP and MOH to avoid duplication of effort and programming gaps;

7. Assist the PMI administrative manager to ensure full accountability and value for money of all PMI funds;

8. Assist the NMCP and MOH in ensuring effective communication and coordination between Roll Back Malaria and GFATM partners including donor agencies and other stakeholders working on malaria control in Mozambique;

9. Ensure effective coordination between MOH departments and managers who implement malaria prevention and control activities in Mozambique. These include MOH Senior Managers, NMCP staff, and staff working in Child Health, Integrated Management of Childhood Illness (IMCI), Reproductive Health, Nutrition, School Health, Health Education and Promotion, and Planning and Coordination;

10. Work with the NMCP and other partners to develop and execute a monitoring and evaluation plan that meets the needs of PMI and is implemented through the MOH system. Visit implementation sites to ascertain all quantitative and qualitative data are collected properly and ensure programmatic quality and value for money are maintained; and

11. Assist the PMI administrative manager to ensure that financial and technical reports for PMI in Mozambique are prepared and submitted as required.

Country/Region: Tanzania Title Describing the Activity: Funding for CDC staff and Monitoring and Evaluation Activities Center/Division and Project Officer at CDC the activity was negotiated with: David Gittelman, NCZVED/DPD/MB Bureau or Mission contact following the activity: Charles Llewellyn, USAID/Tanzania

Amount, type and year of funds to be obligated: \$610,000 Funds Obligated \$610,000

Funds Obligated \$610,000

The PMI Tanzania team proposes that \$610,000 be immediately allocated through CDC in the amended Interagency Agreement (IAA). The plan for allocation of these funds is discussed below, referenced in the more detailed FY2007 PMI Tanzania Malaria Operations Plan (MOP), and outlined in the FY2007 Tanzania MOP Procurement Plan. These proposed allocations are submitted to the PMI Director for final approval.

#### CDC Advisor \$400,000

Dr. Peter McElroy has assumed the in-country CDC staff position for PMI to collaboratively oversee all technical and administrative aspects of the PMI in Tanzania, including drafting, finalizing and implementing details of the TZ/ZAN (Tanzania/Zanzibar) PMI MOP; providing technical guidance to the TZ/ZAN MoHSW and implementing partners on PMI matters relating to malaria prevention, control and treatment activities; monitoring and evaluation of outcomes and impact; and reporting of results. Dr. McElroy will report to the USAID TZ Mission Director or his/her PMI programs designee. He will be supervised by CDC, both technically and administratively.

#### CDC Administrator \$ 60,000

The CDC will hire a Foreign Service National (FSN) as PMI Administrator to support the PMI team in the management of funding mechanisms. This person will report directly to Dr. McElroy and will work closely with USAID TZ Mission counterparts on matters relative to PMI funding in TZ/ZAN.

(Ref. MOP Section 9 Staffing and Administration, TABLE H, Item #3.)

#### CDC travel and technical expertise Mainland--\$ 125,000; Zanzibar--\$ 25,000

The FY 2007 MOP general M&E budget includes \$150,000 to support CDC staff for travel and expert consultation on M&E activities and managing the PMI-related cooperative agreements.

The TZ/ZAN PMI team will require TDY support because CDC staff and partners are directly involved in a number of PMI M&E implementation activities. The management of funding mechanisms and collaboration with the two ministries of health will require additional support.

(Ref. MOP Section 8.C.4 *General M & E for Mainland TZ and Zanzibar*, TABLE G, Item d.)

Country/Region: Pakistan Title Describing the Activity: Pakistan Field Epidemiology and Laboratory Training Program (FELTP) Center/Division and Project Officer at CDC the activity was negotiated with: Lisa Manley, COGH/DESCD Bureau or Mission contact following the activity: Qadeer Ahsan, USAID/Pakistan Amount, type and year of funds to be obligated: \$1,783,676 Time Frame if appropriate: 1 year

#### Pakistan FELTP Work Plan through September 30, 2007

\*Please note that this money is to fund the second year of a three year project. Dates included in this Scope of Work may reflect activities that have already taken place, and which are part of the overall project.

### **Project Goal: To enhance health system capacity in disease surveillance and response.**

Primary Strategies 1) train epidemiologists and laboratorians through the FELTP to make effective use of science - based information to guide public health program decision making and action. 2) Build capacity for epidemiological and laboratory surveillance at the district level by placing FELTP fellows at selected field sites.

#### FELTP Work Plan Acronym Listing

AFP	Acute Flaccid Paralysis
AJK	Azad Jammu Kashmir
CDC	Centers for Disease Control and Prevention
KEMU	King Edward Medical University
EMRO	Eastern Mediterranean Regional Office
EPI	Expanded Programme on Immunization
EQAS	External Quality Assurance Systems
FATA	Federally Administered Tribal Areas
FANA	Federally Administered Northern Areas
FELTP	Field Epidemiology Laboratory and Training Program
GOP	Government of Pakistan
KEMU	King Edward Medical University
MOH	Ministry of Health
NIH	National Institute of Health
PMPHPC	Prime Minister's Programme for Hepatitis Prevention and Control
SOPs	Standard Operating Procedures
TEPHINET	Training Programs in Epidemiology and Public Health Interventions
Network Inc.	
TORs	Terms of Reference
WHO	World Health Organization

# **Objective 1:** To develop a cadre of Ministry of Health field epidemiologists available for strengthening surveillance and outbreak response

Milestone Activities	Proposed target dates	Products / Deliverables
Establish a steering committee comprised of key Federal public health officials	January 2007	Record/Minutes of meetings Formation of advisory council and program work groups (collaboration with EPI/AFP)
Customize short course curriculum and materials	January 2007	Short course curriculum
Conduct epidemiology short course to train MOH staff and identify prospective candidates for FELTP*	February 2007	27 MOH participants from all provinces, FATA, FANA and AJK, trained in epidemiologic principles of outbreak detection/response and disease surveillance 8 trainees selected for first cohort of FELTP
Customize introductory course curriculum	March 2007	Introductory course curriculum ; Introductory course schedule; Introductory course materials ; Pre and post test assessments
Conduct introductory course for first cohort of FELTP trainees *	June 2007	Course assessment
Participate in EMRO TEPHINET conference in Jordan	June2007	Abstracts submitted Oral and poster presentations
Assign FELTP fellows to selected field sites at the national and district levels	July 2007	Fellows placed at selected field sites with identified field supervisors
Customize second contact session curriculum	September 2007	Second contact session curriculum Second contact session schedule Second contact session materials pre and post, test assessments
Conduct second contact session for FELTP fellows *	November 2007	Second contact session completed Reports and presentations of field projects reviewed Pre- and post-course assessments and fellows' progress reviewed
Evaluate the FELTP fellows' design, implementation, or evaluation of surveillance systems	November 2007	Reports from surveillance systems strengthened, designed, or evaluated (2)
Evaluate documented investigations of acute health problems/events	November 2007	Reports of detailed epidemiologic investigations of acute health events (5)

#### **Objective 2:** To assess the Pakistani legal framework concerning disease surveillance, prepare recommendations, and support implementation of a revised legal framework

Milestone Activities	Proposed target dates	Products / Deliverables
World Health Organization mission to review and assess Pakistan's existing legal codes for health	March 2007	Assessment Report
Conduct a stakeholders' workshop to share drafted recommendations *	July 2007	Workshop summary report Proposed Legal framework (draft)
WHO Follow up mission to Pakistan	September 2007	Trip report and draft recommendations to CDC and GOP for follow up activities
Complete a joint WHO/CDC Pakistan final report to be disseminated after approval by the GOP (Government of Pakistan)	December 2007	Legal Framework (official) GOP to initiate legislative processes

# Objective 3: To develop a national laboratory network with strengthened laboratory quality and standards between the National Institute of Health and two selected provinces (Phase 1: NWFP and Punjab)

Milestone Activities	Proposed target dates	Products / Deliverables
Identify (3) focal persons (lab coordinators) from the laboratory network	March 2007	Lab coordinators assigned (NIH, Lady Reading, KEMU)
Train laboratorians from network labs on quality systems development *	June 2007	SOPs and TORs for participating labs and an initial draft plan on EQAS, etc.
Finalize a quality systems plan, with appropriate in- country staffing and technical assistance, that strengthens quality of network lab tests	October 2007	A quality lab systems plan that incorporates crucial elements of quality systems, i.e. standard operating procedures and external quality assurance and control, with training and other resource needs (logistics support)

### **Objective 4:** To develop an electronic information system to support the public health surveillance needs of the MOH

Milestone Activities	Proposed target dates	Products / Deliverables
Visit and identify potential deployment sites in Pakistan to assess available informatics infrastructure and identify software requirements and infrastructure *	October 2006	Assessment report
Develop specifications for case-based reporting of hepatitis	December 2006	Software specification document
Receive alpha version of the pilot software from contractor for review and provide necessary feedback	January 2007	Phase I Alpha report
Provide feedback and recommendations for improvement of alpha version of the pilot software	March 2007	Detailed summary of modifications
Receive beta version of the pilot software from contractor	May 2007	Phase II Beta report
Provide feedback and recommendations for improvement of beta version of the pilot software	June 2007	Detailed modifications report
Install software along with hardware at pilot sites, conduct utility testing, and train site personnel on data entry	August 2007	Detailed summary of required changes to the software system Instructional materials
Conduct software training on data analysis and utilization for first cohort of FELTP participants	September 2007	Instructional materials Training assessments
Conduct pilot software system review for future modification and enhancement	November 2007	Report for modifications/ enhancements to the software system

## **Objective 5:** To define the viral hepatitis burden of illness for Pakistan and assist the MOH prepare and implement a viral hepatitis control plan

Activities	Proposed target dates	Products / Deliverables
Provide technical comments on the national sero-prevalence study on hepatitis	February 2007	Report on recommendations to strengthen sero-prevalance study
CDC hepatitis team to visit PMPHPC *	February 2007	Trip report with recommendations on strengthening hepatitis surveillance
Initiate implementation of hepatitis surveillance with lab support at selected sites	April 2007	Two fellows and field sites (with laboratories) selected for the hepatitis surveillance pilot
Develop national guidelines for hepatitis surveillance	August 2007	National guidelines for hepatitis surveillance draft

Country/Region: Guatemala Title Describing the Activity: Maternal and Child Health National Survey 2007 Center/Division and Project Officer at CDC the activity was negotiated with: Robert Klein, CDC/MERTU Bureau or Mission contact following the activity: Baudilio López, USAID/Guatemala Amount, type and year of funds to be obligated: \$412,000 Time Frame: Through December 2008

#### I. Background

The Maternal and Child Health National Survey 2007 (ENSMI 2007) will follow-up previous ENSMI's conducted in 1987, 1995, 1998/99 and 2002. Conducting these national surveys using the same methodology for data collection, processing, and analysis makes the ENSMI-series the most relevant statistical tool in the health sector, and it has become an exceptional source of comparison on the most important health, nutrition and demographic indicators. ENSMI provides relevant information of the most pressing issues affecting the health of women and children at a national level, as well as by regions and by ethnic groups. It also provides information on relevant information will be representative at a departmental level.

The Maternal and Child Health National Survey 2007 will provide updated information to analyze changes, tendencies, determinants, and consequences of maternal and child health, levels of mortality (neonatal, post-neonatal, infancy, post-infancy, and childhood), fecundity and reproductive patterns.

It is important to underline that this new version of ENSMI, will provide a wider overview of maternal and child health with respect to important issues such as:

- Patients' search of healthcare services
- Healthcare received
- Food intake (purchased and consumption)
- Intra-family violence
- Anemia and anthropometry for children under five years of age and pregnant women.

The results described in this scope of work (SOW) are those related with the work to be undertaken by CDC/CESCAP under the inter-agency agreement (USAID-CDC). The government estimate projected details the local costs of carrying out the survey. This SOW complements the Scope of Work to be performed by CDC/MEASURES.

#### **II.** Purpose and Objectives

The Maternal and Child Health National Survey 2007 has a threefold purpose:

- 1. Provide authorities at all levels: government, international institutions and nongovernmental agencies, information related to demography and demographic analysis, health, and nutrition indicators needed for decision-making.
- 2. Make available internationally information related to demographic, health and nutrition characteristics of the participating countries, in order to conduct comparative health and population studies.
- 3. Broaden the information related to the reproductive health of men and women during their reproductive age.

#### **Objectives:**

- 1. Provide information at a national, urban/rural and regional level; and, for the first time, at a departmental level.
- 2. Provide information on factors that influence fertility levels in the Guatemalan population that will permit comparisons with international statistics.
- 3. Make available updated health data for vulnerable groups such as women between 15-49 years of age, and children under five years of age.
- 4. Provide information on men between 15-59 years old in order to, for the first time; be able to analyze tendencies and changes on reproductive health occurring within this segment of the population during a four- or five-year period.

#### III. Expected Results

#### <u>Result 1: A statistical sample defined to allow statistical inferences at the national,</u> <u>regional and departmental levels</u> A. The universe

The universe for the Maternal and Child Health National Survey 2007 is the national population comprised in the 22 departments of the country; demographic and health data will be obtained from:

- a. Private households including all regular residents living there at the moment of the survey.
- b. Women/men of reproductive age (15-49 years old) identified as eligible at each of the households during the survey.
- c. Children under sixty months of age (5 years old) living at each of the selected households.

#### B. The sample

The sample design shall be probabilistic, stratified, multi-staged, and independent for each department. The Guatemalan National Institute of Statistics (INE) has developed a master sample frame that is advisable to use it for ENSMI 2007. The sample shall allow

estimates at the national, regional, and departmental levels, as well as urban/rural level and estimates on the indigenous and ladino populations. Gross estimates done in Guatemala indicate that in order to have good statistical estimates at the departmental level, some 22,500 households shall be selected for the questionnaire for women and 11,250 for the questionnaire for men, making the 2007 survey the largest of the ENSMI's series in Guatemala to date.

#### <u>Result 2. Vital sections/analysis are included in the 2007 study to allow for comparisons</u> with previous ENSMI's

Sections that were included in past surveys and are required to be included in ENSMI 2007 in order to perform multi-year comparisons, shall include, but not be limited to, the following:

- 1. Household characterization
- 2. Socioeconomic characteristics of the household
- 3. General characteristics of the members of the family
- 4. General characteristics of women between 15 to 49 years of age and men between 15 and 59 years old.
- 5. Marital status, reproduction, histories of births, family planning, fertility preferences, background of the partner, STI and AIDS, health risks, intrafamiliar violence (for women between 15 to 49 years old and men from 15 to 59 years).
- 6. History of pregnancies, medical attention during pregnancy, childbirth and postpartum, lactation, anthropometry (for women between 15 to 49 years of age).
- 7. Immunizations, diarrheal episodes, ARI, oral rehydration, anthropometry (for children under 5 years of age).
- 8. Specific modules for persons between 15 to 24 years of age.

#### <u>Result 3. Ample participation, and acceptance of the 2007 survey as official and</u> <u>endorsed by INE, the MOH and other public and international organizations</u> A. Preparation

With technical assistance of the Centers for Disease Control and Prevention – CDC Atlanta, a Technical Support Group shall be comprised by governmental and non-governmental institutions as well as international cooperation agencies and modules for the development of questionnaires for men and for women in reproductive age shall be elaborated.

For each of the questionnaires to be used in the surveys, a respective manual of operations shall be developed and validated, including among others: manuals for supervisors, survey-takers, anthropometry technicians, cartographers, and sample collectors.

#### B. Pilot testing

When questionnaires have been drafted, a pilot testing shall be conducted immediately to evaluate, modify, and verify their contents. Modifications will be made as appropriate.

The pilot testing shall be conducted in locations with similar cartographic characteristics as the sectors selected for the ENSMI. The pilot testing shall be conducted by expert personnel with previous survey experience who afterwards will become field supervisors and editors.

#### C. Translation of questionnaires

The final version of the questionnaires written in Spanish should be translated into at least the four major Mayan languages; the translations shall not be literal but would focus on contents so that they can be readily understood.

The translations for men aged 15 to 59 years of age shall be done by men and the translations for women aged 15 to 49 years old shall be done by women.

All translations shall be validated with a selected sample of men and women who are native speakers of each of the major Mayan languages.

#### D. Training

The training for field personnel should take into account the national diversity so it is advisable to include personnel not only from the department of Guatemala but also others who represent the rural segment of the Guatemalan population. Selected personnel for anthropometry and sample collection for micronutrient analysis shall receive specialized training from experts on each of these fields.

#### E. Fieldwork

Prior experience indicates that fieldwork should take about an eight-month period; during this period, information from about 750 sectors shall be collected to ensure representation for each of the 22 departments of the country. Field staff should include one field director, three assistants and a number of field teams whose number-composition shall be defined by CDC/CESCAP based on a thoughtful thorough analysis. Personnel for the CDC/CESCAP central office shall conduct visits during the data collection process to ensure that the work is done following rigorous procedures to ensure data quality.

#### F. Data processing

The data collected shall be entered into network linked computers using applications designed and developed for this specific purpose. The totality of the questionnaire contents shall be entered twice in order to have 100% verification. The director shall ensure that digitalization error is decreased to a minimum. Special effort shall be deployed for detection and correction of data inconsistencies to diminish master errors.

#### G. Map development

Taking advantage of the platform of maps in existence at CDC/CESCAP, thematic maps shall be developed at a regional level for comparison with the results of previous ENSMIs. In addition, CDC/CESCAP should have the unique opportunity to develop departmental thematic maps. This will help underscore the status of each locality for each of the indicators.

### Result No. 4. In a joint effort with the GOG, fund raising carried out to complete the full amount required to cover local costs

The MOH has already initiated a series of fund raising activities to ensure that the full amount of resources required to implement the 2007 survey is available. CDC/CESCAP shall work collaboratively with the MOH to ensure that other donor and GOG entities contribute with their own monies to finance the survey. USAID/GUATEMALA will provide about one third of the total funds required to pay local costs of the survey; therefore, CDC/CESCAP must work closely with the MOH to raise the additional two thirds needed to complete the full amount of funding required.

#### <u>Result 5. Close coordination between CDC/CESCAP and CDC/MEASURES is secured to</u> <u>guarantee high quality of 2007 survey</u> A. Technical Assistance

As on the past ENSMI (2002), CDC Atlanta will provide technical assistance to assure the quality of the information collected, processed, and analyzed.

This support will mainly be provided for the following:

- Planning and pretest questionnaires
- Data entry/cleaning programs and standardization of field staff
- Data cleaning/analysis file definition and data analysis
- Report writing & printing
- Databases preparation

#### **IV.** Period of Performance

The performance period extends through December 2008 to ensure wide dissemination and in-depth analysis of the data. Mission expects a preliminary report by September 30, 2007. The suggested timeline is included as Annex 1 to the current SOW.

#### V. Deliverables

The final results of the ENSMI will be presented in stages to ensure that most of data generated is shown and properly analyzed in the reports:

• Preliminary Report

- Summary of the Report
- Final Report for Women
- Final Report for Men
- Executive Report

The presentation of results will be made to the highest authorities from the Ministry of Public Health and the National Institute of Statistics, non-governmental organizations, and financing agencies. USAID/GUATEMALA shall receive at least 100 hard copies of each of the aforementioned reports.

In addition, USAID/GUATEMALA expects the following reports:

- o The data base
- The aforementioned reports on electronic format
- One electronic copy of the power point or any other presentations related with the 2007 ENSMI
- A press release
- Any other information/reports deemed necessary

#### VI. Logistic Support

All the logistic support will be provided by CDC/CESCAP, including but not limited to the following: office space, vehicles, equipment, and office supplies

#### VII. Government Estimate

The total cost of the ENSMI 2007 is much higher than the amount that the USAID/GUATEMALA Mission has available for this purpose, US\$1,155,000.00. Therefore, CDC/CESCAP is expected to work closely with the MOH authorities and USAID/GUATEMALA staff to advocate for additional funding in order to get the exact amount of resources required to pay local costs related to the ENSMI 2007 survey.

DESCRIPTION	USAID/GUATEMAL A CONTRIBUTION	OTHERS CONTRIBUTIO N	TOTAL (US\$)
A. TECH. PERSONNEL	160,150	251,510	411,660
B. MATERIALS & COMMUNICATIONS	138,600	268,950	407,550
C. CARTOGRAPHIC ACTUALIZATION	111,700	155,336	267,036
D. TRANSLATION OF		8,900	
QUESTIONNAIRES	15,000		23,900
E. PILOT TESTING	10,000	2,450	12,450
F. TRAINING	15,000	10,500	25,500
G. FIELDWORK	438,900	772,976	1,211,876

H. DATA PROCESSING	57,750	95,250	153,000
I. DEVELOPMENT &		171,050	
REPORT REPRODUCTION	103,950		275,000
J. SOCIALIZATION & REPORT DIFFUSION	11,550	17,950	29,500
K. THEMATIC IN- DEPTH ANALYSIS	80,850	131,150	212,000
J. GENERAL EXPENSES	11,550	24,000	35,500
TOTAL	1,155,000	1,910,022	3,065,022

### Annex I

#### TIMETABLE

Nº	OBJETIVE	ACTIVITIES	PERIOD
1.	Official approval of ENSMI	Call a meeting with institutions that might support ENSMI 2006; Develop agreements through which the survey may be institutionalized	June 2006
2.	Formation of the Technical Support Group (TSG)	Contact the institutions that might form the TSG group of ENSMI 2006; Establish working conditions (periodicity of meetings, formation of groups, etc.); Identify the persons responsible by institution and by theme of the questionnaire	July 2006
3.	Search of financial sources with international agencies.	Contact institutions that might financially support the ENSMI 2006; Develop through agreements and letters of understanding commitments to support the survey; Establish the financing of the survey by products (fieldwork, reproduction of reports, digitalization, etc.)	July 2006
4.	Contents analysis and questionnaires	Conduct specific meetings with special institutions to determine the theme of the questionnaire; E-mail base sections of the questionnaires to institutions by theme or specialty; Analyze questionnaires for women and for men by comparing with the results obtained in 2002; Analyze the contents of the sections with highest demand for modification and/or broadening	July-September 2006
5.	Design and selection of the sample	Design of the sample framework; Selection of the sample;	June - July 2006
6.	Fieldwork planning	Establish field work methodology; Establish work load distribution for each post; Establish field work logistics with respect to the transportation of samples;	September 2006

Nº	OBJETIVE	ACTIVITIES	PERIOD
7.	Pilot testing	Review questionnaire (different modules and sections); Classroom practice for modules and sections of questionnaires for men, women, and special groups; Field practice in places similar to final work sites	October 2006
8.	Cartographic actualization	Identification of selected sectors; Fieldwork for actualization; Processing of updated information; Reproduction of updated material	September 2006- January 2007
9.	Translation of questionnaires	Contact institutions and persons with the ability to translatenot literally but by content different modules and sections of the questionnaires; Establish translating methodologies	October 2006- January 2007
10.	Fieldwork	Collect data at a national level for 30,000 women between the ages of 15 to 49 years and 20,000 men from 15 to 59 years of age; Conduct the necessary surveys to obtain data for the modules addressed to special ENSMI 2006 groups	February – August 2007
11.	Data input	Code and edit 50,000 questionnaires; Input and verification of 100% of the 50,000 questionnaires; Establish and detect inconsistencies on the data of the questionnaires	February - September 2007
12.	Tabulation of data	Develop the necessary applications for data tabulation; Generate initial tabulators for an overall revision on data consistency; Generate specific tabulations by theme (PF, fecundity, nutrition, etc)	August – September 2007

Nº	OBJETIVE	ACTIVITIES	PERIOD
13.	Preparation and presentation of the Preliminary Report	Design the report (contents, size – number of pages) material; Establish the methodology for the elaboration of the report; Write up the report and its contents; Design and elaboration of charts and graphs; Official presentation of the report to the institutions	September - October 2007
14.	Preparation and presentation of the Final Reports	Design the report (content, size, number of pages, material); Establish elaboration methodology for the report; Write up contents for the report; Design and elaboration of charts and graphs; Official presentation of the report to the institutions;	January -August 2008
15.	Preparation and presentation of Executive Reports	Design reports (contents, size, number of pages, material); Establish the methodology for the elaboration of the reports; Write up contents for the report; Design and elaboration of charts and graphs; Official presentation of reports for the institutions; Workshops for diffusion of results at a national level (regional and departmental)	September 2008 - December 2008

#### ANNEX B REVISED FINANCIAL PLAN AND BUDGET Umbrella IAA between USAID and CDC

Below is a summary of the budget for each component by directive and implementing unit within CDC to be funded under this amendment in FY 07.

Component (by funding source)	<b>Implementing Unit</b>	Budget (\$)
USAID/OFDA	NCPDCID/DEISS	35,000
USAID/OFDA	NCZVED/DVRD	184,492
USAID/Malawi—PMI	NCZVED/DPD/MB	265,000
USAID/Mozambique—PMI	NCZVED/DPD/MB	388,000
USAID/Tanzania—PMI	NCZVED/DPD/MB	610,000
USAID/Pakistan (MAARD)	COGH/DESCD	1,783,676
USAID/Guatemala (MAARD)	CDC/MERTU	412,000
	TOTAL:	\$ 3,678,168