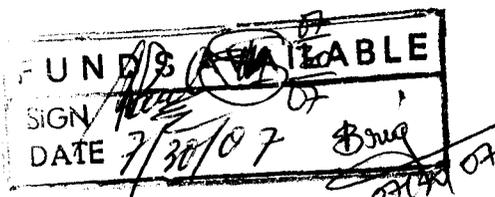


AGENCY FOR INTERNATIONAL DEVELOPMENT			
MODIFIED ACQUISITION AND ASSISTANCE REQUEST DOCUMENT			
			Status: Page: 1 of 5
1. Benefiting Country Benin	2. Managing Request No. 680-0230-70014 Org: USAID/FHT		3. Amend No. Original
4. Authorized Agent USAID/W/OP	5. Request Title: : PMI Indoor Residual Spraying (IRS) baseline assessment	6. Date Award Needed By: August 15, 2007	
7. Type of Action <input checked="" type="checkbox"/> New Award <input type="checkbox"/> Mod to Existing Award <input type="checkbox"/> Inc Funding <input checked="" type="checkbox"/> Acquisition <input type="checkbox"/> Assistance <input type="checkbox"/> Inter-Agency <input type="checkbox"/> Unilateral Agreement <input checked="" type="checkbox"/> Subobligation Under a Bilateral Agreement		8. Contract/Grant/Cooperative Agreement Reference Number (If this is for an order or a modification to an award) AAG-G-00-99-00005-00	
ACTION TYPE -			
9. USAID Funding (attach a detailed budget in support of line items as Attachment A)			
Activity :	727/84095	Fund Account:	2007/2008 CD
			Amount Committed : \$105,000.00
Activity :		Fund Account:	
			Amount Committed :
Activity :		Fund Account:	
			Amount Committed :
Activity :		Fund	
			Total Commitment: \$105,000.00
Organization/Activity Chaining to the Lowest level: USAID/BENIN/FHT/SO5/IR2			
10. Instructions to Authorized Agent: The authorized agent is requested to incrementally fund the "Infectious Diseases Results Package: World Health Organization Umbrella Grant project (936-3100.02)" by \$105,000 for the baseline entomology survey preceding the "IRS" activity (\$15,000) on the site targeted for "IRS" and the operational research assessing the LLITN and IRS interventions efficacy in areas of mosquito resistance to the "pyrethroid" insecticide (\$90,000) as described in the attached Scope of Work. The assessments will be locally coordinated by the Centre pour la Recherche Entomologique de Cotonou (CREC). The funding herein is an advance to the PMI Project and should be put back into the SO5 budget as soon as the PMI funding becomes available. Funding is provided by the Strategic Objective 5 (680-0230) Agreement budget as indicated in the attached ANNEX 2. US\$1=cfa475.			
11. Address of Voucher Paying Office Contact: CONTROLLER'S OFFICE, USAID/BENIN, COTONOU			
Addressee:	Controller	Office and Room:	Controller, USAID Benin
Address (line one):	USAID/Benin	Address (line two):	01 BP 2012, Cotonou
Location:	Cotonou	Phone:	(229) 30-05-00
12. Participants			
Requestor	Charles OGOUNCHI, FHT/R&R	Signature:	<i>[Signature]</i> 07/18/2007
Program Manager	Pascal ZINZINDOHOUE, FHT Leader	Signature:	<i>[Signature]</i> 07/18/2007
Program Officer	Michele SEIBOU, Acting OPC Leader	Signature:	<i>[Signature]</i> 07/19/2007
Negotiator		Signature:	
Contracting/Agreement Officer		Signature:	
Controller (Mission funded)	Derrick BROWN, Controller	Signature:	
Mission Director	Rudolph THOMAS, Director	Signature:	<i>[Signature]</i> 8/6/07
13. The Program Manager is responsible for recording the commitment as soon as the issue that prevented this from being recorded in A&A is resolved.			
Program Manager Signature:			

WP52 Macro



AGENCY FOR INTERNATIONAL DEVELOPMENT			
MODIFIED ACQUISITION AND ASSISTANCE REQUEST DOCUMENT			
			Status: Page: 1 of 5
1. Benefiting Country Benin	2. Managing Request No. 680-0230-70014 Org: USAID/FHT		3. Amend No. Original
4. Authorized Agent USAID/W/OP	5. Request Title: PMI Indoor Residual Spraying (IRS) baseline assessment	6. Date Award Needed By: August 15, 2007	
7. Type of Action <input checked="" type="checkbox"/> New Award <input type="checkbox"/> Mod to Existing Award <input type="checkbox"/> Inc Funding <input checked="" type="checkbox"/> Acquisition <input type="checkbox"/> Assistance <input type="checkbox"/> Inter-Agency <input type="checkbox"/> Unilateral Agreement <input checked="" type="checkbox"/> Subobligation Under a Bilateral Agreement			8. Contract/Grant/Cooperative Agreement Reference Number (If this is for an order or a modification to an award) AAG-C-00-99-00005-00
ACTION TYPE -			
9. USAID Funding (attach a detailed budget in support of line items as Attachment A)			
Activity:	Fund Account:	Amount Committed:	\$105,000.00
Activity: 727/81025	Fund Account: 9007/2008 CD	Amount Committed:	
Activity:	Fund Account:	Amount Committed:	
Activity:	Fund Account:	Amount Committed:	
Activity:	Fund Account:	Amount Committed:	
Activity:	Fund Account:	Total Commitment:	\$105,000.00
Organization/Activity Chaining to the Lowest level: USAID/BENIN/FHT/SO5/IR2			
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11. Address of Voucher Paying Office Contact: CONTROLLER'S OFFICE, USAID/BENIN, COTONOU			
Addressee:	Controller	Office and Room:	Controller, USAID Benin
Address (line one):	USAID/Benin	Address (line two):	01 BP 2012, Cotonou
Location:	Cotonou	Phone:	(229) 30-05-00
12. Participants			
Requestor	Charles OGOUNCHI, FHT/R&R	Signature:	<i>[Signature]</i> 07/18/2007
Program Manager	Pascal ZINZINDOHOUE, FHT Leader	Signature:	<i>[Signature]</i> 07/18/2007
Program Officer	Michele SEIBOU, Acting OPC-Leader	Signature:	<i>[Signature]</i> 07/19/2007
Negotiator		Signature:	
Contracting/Agreement Officer		Signature:	
Controller (Mission funded)	Donnick BROWN, Controller J.Gulry	Signature:	<i>[Signature]</i> 07/31/07
Mission Director	Rudolph THOMAS, Director	Signature:	
13. The Program Manager is responsible for recording the commitment as soon as the issue that prevented this from being recorded in A&A is resolved.			
Program Manager Signature:			

WP52 Macro

FUNDING AVAILABLE
SIGN: *[Signature]*
DATE: 7/30/07 *[Signature]*

A N N E X 1

Funding Recommendations for a Baseline Entomology study & a Mosquito Resistance Impact on the PMI LLITN/ IRS Activity

No.	SOAG 680-0230 Budget Line-Item	Fund/BBFY/EB FY	AFR/DP Program Area	AFR/DP Program Element	Program Sub- Element	Program Sub- Element Code	CSH-ID AMOUNT
	-	-	Health	Malaria	-		-
		FY 2007 Obligations Budget Allowance information:					
1.	Intermediate Result 2 (IR2)¹						
1.1	- Vector resistance to the "pyrethroid" insecticide impact assessment ¹	CD-2007/2008	A11	A049	Anti Microbial Resistance	A0185 ¹	30,921
			A11	A049	PD&L	A0193	59,079
1.2	- Baseline entomology survey preceding the IRS activity	CD-2007/2008	A11	A049	PD&L	A0193	15,000
	TOTAL	-	-	-	-	-	105,000

OGC_DOC:\X\Usersf\Budget\MAARD\680-0230\FY 2007\IRS Assesst-PMI2

Ce 23 Juillet 2007

¹ Per TL 07/0/2007 instructions, \$105,000 should be charged to IR2 from the amount reserved to ID commodities
 In fact, the PD&L was charged for \$ 74,079 and only \$30,921 was taken from the money reserved for LLITNs (OPC attached mail).
 This sub-commitment was not planned for.

680-MAARD-680-0230-3-70014

Line Nu	Amount	Template	BBFY	Fund	Op Unit	EBFY	Program I	Sub-Eleme	Program A	SOC	Distribution	BGA	YBA
1	\$30,921.00	680FHT2007CD	2007	CD	BENIN	2008	A049	A0185	A11	4100202	680-M	680	2007
2	\$59,079.00	680FHT2007CD	2007	CD	BENIN	2008	A049	A0193	A11	4100202	680-M	680	2007
3	\$15,000.00	680FHT2007CD	2007	CD	BENIN	2008	A049	A0193	A11	4100202	680-M	680	2007
	\$105,000.00												

FUNDS AVAILABLE
SIGN *[Signature]*
DATE 7/30/07

15. Delivery and Shipping Schedule

	Description	Delivery Qty	Delivery Date	Location Type	Location Address
	Baseline entomology survey preceding the IRS activity			Cotonou/Benin	USAID/Benin, c/o American Embassy, 01 BP 2012, Cotonou, République du Benin
	Assessment of the impact of vector resistance to the "pyrethroid" insecticide on the PMI/Benin Project interventions. assessment			Cotonou/Benin	USAID/Benin, c/o American Embassy, 01 BP 2012, Cotonou, République du Benin

Request No.: 680-0230-3-

16. Special Provisions

A. Language Requirements (Include funds in budget or training as required.) English/French: S=4/4; R=4/4

B. Access to classified information NO Access Type: N/A

C. Duty post(s) and duration of technical specialists(s) services at post(s) (months): N/A
 D. Dependents' travel and support N/A

E. Geographic code applicable to procurement waiver(s)
 1. 000 2. 935 3. 941 4. 899 5. Other (specify)

F. Salary approval(s) to exceed FS-1 salary are:
 1. attached 2. in process 3. N/A
 G. Cooperating country acceptance
 1. has been obtained 2. is in process 3. is not applicable to services required

H. Clearance for procurement of IRT equipment, software, and services is:
 1. attached 2. is in process 3. N/A

I. OMB approval of any report to be completed by ten or more members of the general public under the statement of work. 1. attached 2. in process 3. N/A

J. Participant Training is is not being funded.

K. Requirement (contracts only) is recommended for:
 SB Set-Aside SDB Set Aside SBA 8(a) Program No Recommendation

L. Other (specify)

17. PROVISIONS FOR LOGISTIC SUPPORT	IN KIND SUPPLIED BY		FROM LOCAL CURRENCY SUPPLIED BY		TO BE PROVIDED OR ARRANGED BY SUPPLIER	NA
	USAID	COOPERATING COUNTRY	USAID	COOPERATING COUNTRY		
Office space						X
Office Equipment						X
Office furniture						X
Official duties transportation						X
Other						X

Commissary use:[]YES [X]NO Pouch Use:[]YES [X]NO Embassy Health Room Privileges:[]YES [X]NO

Request No: 680-0230-3-

18. Relationship of Contractor, Recipient, or Participating Agency to Cooperating Country and to USAID:

Relationship and Responsibilities:

The recipient shall work in close relationship with the Family Health Team (FHT) Leader or his designee.

19. Government furnished property/Government furnished equipment

N/a

20. Summary of attachments that accompany the request (check applicable boxes)

- A. Detailed budget estimate in support of line items
- B. Evaluation criteria for competitive procurement
- C. Justification for procurement by other than full and open competition or noncompetitive assistance
- D. Statement of work or program description
- E. Waiver(s), justification(s), clearance(s), approval(s)

President's Malaria Initiative (PMI) Indoor Residual Spraying (IRS): Baseline entomological survey and operational research to assess effect of vector insecticide resistance on impact and efficacy of PMI vector control

Program Description

Benin has holoendemic, perennial transmission of malaria, characterized by high attack rates in children under five years of age and pregnant women. The primary malaria control strategy of the National Malaria Control Program (NMCP) and the PMI is based on high coverage of vulnerable populations with LLINs. However, the NMCP also recognizes the value of time-limited IRS applications, particularly where ITN coverage is low. While the NMCP's 2006-2010 Strategic Plan mentions IRS, it does not yet include a defined plan and strategy for how IRS will be implemented in the country. IRS was implemented in Benin (using DDT, malathion, and carbamate insecticides) during the malaria eradication era (1960-1970) but no spraying has been done in Benin for many years due to a lack of trained personnel and financial resources. In addition, high levels of vector resistance to pyrethroids at selected sites in Southern Benin present challenges for the selection of insecticides for IRS. Managing pyrethroid resistance is a critical issue facing malaria control interventions worldwide because: (1) IRS programs commonly use pyrethroids, (2) ITN technology, at the present time, relies solely on pyrethroids, and (3) pyrethroids are used on a large scale in agriculture. Conducting surveillance and using the results to manage resistance are priority activities.

The NMCP has requested support from PMI to implement IRS in Benin. Program objectives include the following:

1. Baseline Entomological Evaluation in IRS target areas: PMI plans to conduct an initial entomological survey to establish the presence or absence of vectors, their density and their insecticide resistance profile prior to making a final determination of where IRS will be done.
2. Operational Research to assess effect of vector insecticide resistance on impact and efficacy of PMI vector control: Recent findings published by a consortium of research groups working in Benin, including the Center for Entomology Research-Cotonou (CREC); the Institute for Research and Development (IRD), University of Montpellier, France; and the London School of Hygiene and Tropical Medicine (LSH&TM), suggest that vector resistance to pyrethroid insecticides may compromise the impact of ITN and IRS interventions in Benin. Evidence supporting this belief comes from experimental hut studies in Benin that demonstrated that, in an area where vectors are pyrethroid-resistant, ITNs and IRS together did not prevent vectors from blood feeding (i.e. transmission) behavior. However, based on this entomological study alone, it remains unclear whether the pyrethroid resistance situation in Benin will compromise the clinical impact of ITNs and IRS. An IRD clinical trial, already funded by the French government, can add an arm to assess whether pyrethroid resistance in Southern Benin reduces the clinical impact of ITN and IRS interventions.

Roles and Responsibilities: Under PMI, USAID and NMCP will assume joint responsibility for achieving the shared program objectives. Benin has a strong national insecticide resistance surveillance program, which is implemented by the Center for Entomology Research –

Cotonou (CREC). CREC is part of the MOH and provides entomological support to the NMCP. It conducts quality assurance testing of ITNs (insecticidal effect, durability, flammability) and has excellent insectary facilities. In collaboration with several research institutions (including IRD and LSH&TM), CREC is conducting important studies on the impact of vector resistance on IRS and ITN malaria interventions. Through this Task Order, WHO will provide funding to CREC to:

1. **Conduct a baseline survey.** Focusing on areas with high malaria prevalence in target groups, high entomological inoculation rates, high vector densities, and high infant mortality rates has led the NMCP to target areas in the south (Ouémé /Plateau, Mono/Couffo, Zou/Collines) and northeast (Natitingou) for IRS. Baseline data collection will take place in all 3 of the proposed IRS target communes: Aguegue, Porto Novo, and Seme-Kpodji (located in one health zone of Ouémé Department), beginning in Aug - Sep '07, at the end of the long rains (when vector population size is largest).
2. **Expand an operations research (OR) study** being conducted in an area of high pyrethroid resistance to include:

(1) A phase III randomized control trial with 4 arm to assess the impact of LLINs alone and LLINs combined with IRS (with a non-pyrethroid insecticide) on measures of clinical malaria (anemia and malaria infection among children under five). The PMI OR activity will add the 4th arm of the study. The phase III clinical trial will run for 2 years with interim results available every 6 months.

(2) Phase II experimental hut trials to determine whether LLINs combined with IRS (with a non-pyrethroid insecticide) can be used to manage pyrethroid resistance in the vector population (e.g. by killing off pyrethroid-resistant mosquitoes and thus 'restoring' the effectiveness of LLINs). The phase II results will show if the addition of IRS with a non-pyrethroid insecticide can reverse the result observed by N'Guessan (increased vector blood feeding / 'malaria transmission'). The phase I I studies will be completed within 6 months.

Funding/Budget: \$105,000

1. Baseline survey (\$15,000)
2. OR Study \$285,000, of which \$90,000 is required at this time
 - Phase III trial (\$220,000): The amount requested will cover the costs to the PIs of adding the PMI arm to the existing phase III study. Costs reflect: a large sample size, man-power to collect clinical data, cost of insecticide and LLINs, clinical and laboratory analysis of human (blood smears) and mosquito specimens. Per diem, transportation, logistics and supervision costs associated with management of program.
 - Phase II hut trials (\$40,000): Costs reflect: preliminary evaluation of sites, construction of huts (slabs, moats, special walls, ceiling, roof, verandah traps), organization of mosquito collectors, routine mosquito collections, specimen analysis, data management, and supervision.
 - Overhead (\$25,000)