

TANZANIA

December 27, 2006

Chito Padilla Director and Senior Contracting Officer. RTI International 3040 Cornwallis Road Research Triangle Park, NC 27709-2194

Reference: Malaria Control in Mainland Tanzania and Zanzibar

Subject: Cooperative Agreement No. 621-A-00-07-00009-00

Dear Mr. Padilla

Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the U.S. Agency for International Development (USAID) hereby awards to **RTI International**, hereinafter referred to as the "Recipient", the sum of \$3,356,770 to provide support for a program in Malaria Control in Mainland Tanzania and Zanzibar as described in the Schedule of this award and in Attachment B, entitled "Program Description."

This Cooperative Agreement is effective and obligation of \$2,812,000 is made as of the date of this letter and shall apply to expenditures made by the Recipient in furtherance of program objectives during the period beginning with the effective date of December 27, 2006 and ending October 30, 2007. USAID will not be liable for reimbursing the Recipient for any costs in excess of the obligated amount.

This Cooperative Agreement is made to **RTI International**, on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment A (the Schedule), Attachment B (the Program Description), and Attachment C (the Standard Provisions), all of which have been agreed to by your organization.

Please sign the original and all enclosed copies of this letter to acknowledge your receipt of the Cooperative Agreement, and return the original and all but one copy to the Agreement Officer.

Sincerely yours,

Kenneth P. LuePhang

Agreement Officer

Attachments:

A. Schedule

B. Program Description

C. Standard Provisions

ACKNOWLEDGED: RTI International.

BY:

Chito Padilla

TITLE: Director and Senior Contracting Officer

DATE: <u>December 29, 2006</u>

A. GENERAL

Amount Obligated this Action:\$2,812,000

- 2. Total Estimated USAID Amount: \$3,356,770
- 3. Total Obligated USAID Amount:\$2,812,000
- 4. Cost-Sharing Amount (Non-Federal):\$0
- 5. Activity Title: Malaria Control in Mainland Tanzania and Zanzibar
- 6. USAID Technical Office: USAID/Tanzania
- 7. Tax I.D. Number: 56-0686338
- 8. DUNS No.:00-486-8105
- 9. LOC Number:HHS-33A8P

B. SPECIFIC

Fund Account:CD 2007 2008. Amount:\$2,800,000

Fund Account: DV 2006 2007. Amount:\$12,000

MAARD-621A11-A049-7001

Total amount obligated:\$2,812,000

C. PAYMENT OFFICE

USAID/M/FM/CMP/GIB RONALD REAGAN BUILDING 1300 PENNSYLVANIA AVE., NW WASHINGTON, D.C. 20523-7700

	Table of Contents	Page
SCHEDU	JLE	5
۸ 1	PURPOSE OF COOPERATIVE AGREEMENT	5
	PERIOD OF COOPERATIVE AGREEMENT	
	AMOUNT OF COOPERATIVE AGREEMENT AND PAYMENT	
	REPORTING AND EVALUATION	
	INDIRECT COST RATE	
	TITLE TO PROPERTY.	
	AUTHORIZED GEOGRAPHIC CODE	
	COST SHARING	
	O SUBSTANTIAL INVOLVEMENT	
A.12	2 SPECIAL PROVISIONS	8
PROGR <i>E</i>	AM DESCRIPTION	9
I. MANI	ARD PROVISIONS FOR U.S., NONGOVERNMENTAL ORGANIZAT	ΓAL
	CIPIENTS	
1.	APPLICABILITY OF 22 CFR PART 226 (May 2005)	
2.	INELIGIBLE COUNTRIES (MAY 1986)	
3.	NONDISCRIMINATION (MAY 1986)	10
4.	NONLIABILITY (NOVEMBER 1985)	
5.	AMENDMENT (NOVEMBER 1985)	
6. 7.	NOTICES (NOVEMBER 1985)SUBAGREEMENTS (June 1999)	
7. 8.	OMB APPROVAL UNDER THE PAPERWORK REDUCTION ACT (December	
9.	USAID ELIGIBILITY RULES FOR GOODS AND SERVICES (April 1998)	
9. 10.	DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS (J	anuary 2004) 15
11.	DRUG-FREE WORKPLACE (January 2004)	
12.	EQUAL PROTECTION OF THE LAWS FOR FAITH-BASED AND COMMUNIT	Υ
	ORGANIZATIONS (February 2004)	
13.	IMPLEMENTATION OF E.O. 13224 EXECUTIVE ORDER ON TERRORIS	T FINANCING
	(March 2002)	18
14.	MARKING UNDER USAID-FUNDED ASSISTANCE INSTRUMENTS (Decem	
15.	REGULATIONS GOVERNING EMPLOYEES (AUGUST 1992)	
16.	CONVERSION OF UNITED STATES DOLLARS TO LOCAL CURRENCY (NO	
17.	USE OF POUCH FACILITIES (AUGUST 1992)	
18.	INTERNATIONAL AIR TRAVEL AND TRANSPORTATION (JUNE 1999)	
19.	OCEAN SHIPMENT OF GOODS (JUNE 1999)	
20.	LOCAL PROCUREMENT (April 1998)	29
21.	VOLUNTARY POPULATION PLANNING ACTIVITIES – MANDATORY REQU 2006)	30
22.	NEGOTIATED INDIRECT COST RATES - PROVISIONAL (Nonprofit) (Apri	
23.	PARTICIPANT TRAINING (April 1998)	32
24.	TITLE TO AND CARE OF PROPERTY (COOPERATING COUNTRY TITLE) (N	
25.	PUBLIC NOTICES (MARCH 2004)	
26. 27	REPORTING OF FOREIGN TAXES (March 2006)FOREIGN GOVERNMENT DELEGATIONS TO INTERNATIONAL CONFEREN	
21	2002)	
28	USAID DISABULITY POLICYABILITY POLICY - ASSISTANCE (DECEMBER	2 2004) 38

Attachment A

SCHEDULE

A.1 PURPOSE OF COOPERATIVE AGREEMENT

The purpose of this Cooperative Agreement is to provide support for the program described in Attachment 2 to this Cooperative Agreement entitled "Program Description."

A.2 PERIOD OF COOPERATIVE AGREEMENT

- 1. The effective date of this Cooperative Agreement is **December 27**, **2006**. The estimated completion date of this Cooperative Agreement is **December 26**, **2007**.
- 2. Funds obligated hereunder are available for program expenditures for the estimated period **December 27**, 2006 to October 30, 2007.

A.3 AMOUNT OF COOPERATIVE AGREEMENT AND PAYMENT

- 1. The total estimated amount of this Cooperative Agreement for the period shown in A.2.1 above is \$3,356,770.
- 2. USAID hereby obligates the amount of \$2,812,000 for program expenditures during the period set forth in A.2.2 above and as shown in the Budget below. The Recipient will be given written notice by the Agreement Officer if additional funds will be added. USAID is not obligated to reimburse the Recipient for the expenditure of amounts in excess of the total obligated amount. The continuation of activities depends on the results and determination of yearly assessment and availability of funds.
- Payment will be made to the Recipient by Letter of Credit in accordance with procedures set forth in 22 CFR 226

A.4 COOPERATIVE AGREEMENT BUDGET

The following is the Agreement Budget, including local cost financing items, if authorized. Revisions to this budget shall be made in accordance with 22 CFR 226.

	Item	Amount
1		
2		
3		
4		
5		
6		
7		
_		
8		
	Total USAID Budget	3,356,770

172

A.5 REPORTING AND EVALUATION

1. Financial Reporting

The Recipient shall submit an original and two copies quarterly. Financial Reports shall be in keeping with 22 CFR 226.52.

In accordance with 22 CFR 226.52, the SF 269 and SF 272 will be required on a quarterly basis. The recipient shall submit these forms in the following manner:

- (1) The SF 272 and 272a (if necessary) must be submitted via electronic format to the U.S. Department of Health and Human Services (http://www.dpm.psc.gov). A copy of this form shall also be submitted at the same time to the Agreement Officer and the Cognizant Technical Officer.
- (2) The SF 269 or 269a (as appropriate) shall be submitted to the Cognizant Technical officer with one copy to the Agreement Officer.
- (3) In accordance with 22 CFR 226.70-72, the original and two copies of all final financial reports shall be submitted to M/FM, the Agreement Officer (if requested) and the CTO. The electronic version of the final SF 272 or 272a shall be submitted to HHS in accordance with paragraph (1) above.

2. Program Reporting

The Recipient shall submit two copies of a performance report to the Cognizant Technical Officer. The performance reports are required to be submitted quarterly and shall contain the following information:

- a) Summarize results of all activities under this award.
- b) Explanation of quantifiable output of the programs or projects, as per the Illustrative Project Monitoring and Evaluation Matrix;
- c) Reasons why established goals were not met, if appropriate;
- d) Analysis and explanation of any cost overruns or high unit costs (recipients must immediately notify USAID of developments that have a significant impact on award-supported activities).

Notification must be given to USAID in the case of problems, delays, or adverse conditions which materially impair the ability to meet the objectives of the award. These notifications must include a statement of the action taken or contemplated, and any assistance needed to resolve the situation.

3. Final Report

The Recipient shall submit the original and one copy to M/FM, the Agreement Officer (if requested), and the CTO and one copy, in electronic (preferred) or paper form of final documents to one of the following: (a) Via E-mail: docsubmit@dec.cdie.org; (b) Via U.S. Postal Service: Development Experience Clearinghouse, 8403 Colesville Road, Suite 210 Silver Spring, MD 20910, USA; (c) Via Fax: (301) 588-7787; or (d) Online:

http://www.dec.org/index.cfm?fuseaction=docSubmit.home.

The final performance report shall include:

An executive summary of the recipient's accomplishments in achieving the Expected Results and conclusions about areas in need of future assistance; an overall description of the recipient's activities and attainment of results during the life of the Cooperative Agreement; an assessment of progress made toward accomplishing the Expected Results; significance of these activities; important research findings; comments and recommendations; a section on how the program will be sustained after termination of USAID funding, and a fiscal report that describes how the Recipient's funds were used. See 22 CFR 226.51.

The end of project report on IRS will contain, at a minimum, the following: a) achievements (e.g. number of households sprayed, personnel trained, and maps produced, etc.); b) difficulties in the implementation of IRS; c) recommendations for future implementation of IRS; d) projections, based on best epidemiological and entomological evidence, for future needs of IRS.

A separate report will be required for the Malaria Education Program at the end of the first quarter

A.6 INDIRECT COST RATE

Pending establishment of revised provisional or final indirect cost rates, allowable indirect costs shall be reimbursed on the basis of the following negotiated provisional or predetermined rates and the appropriate bases:

Base of Application:

- (A) Direct salaries and wages including fringe benefits (Also included in the rate base for computation purposes is B&P/IR&D labor including related fringe benefits)
- (B) Total direct and indirect costs, excluding amounts for direct material, subcontracts, consultants and equipments, intersegment charges, and "pass through" award funds. It includes IR&D cost.
- (C) Direct materials, subcontracts, consultants and equipment and intersegment charges.
- (D) Facilities Cost of Money.

A.7 TITLE TO PROPERTY

Property Title will be vested with the Cooperative Country.

A.8 AUTHORIZED GEOGRAPHIC CODE

The authorized geographic code for procurement of goods and services under this award is 935.

A.9 COST SHARING

The Recipient agrees to expend an amount not less than of the total activity costs.

A.10 SUBSTANTIAL INVOLVEMENT

1.42

Substantial involvement during the implementation of this Agreement shall be limited to approval of the elements listed below:

- Approval of Recipient Implementation Plans.
- b. Approval of specified key personnel assigned to the positions listed below. The personnel currently listed have been approved. All changes thereto must be submitted for the approval by the Cognizant Technical Officer.

A.12 SPECIAL PROVISIONS

A.12.1 USAID DISABILITY POLICY (DEC 2004)

- (a) The objectives of the USAID Disability Policy are (1) to enhance the attainment of United States foreign assistance program goals by promoting the participation and equalization of opportunities of individuals with disabilities in USAID policy, country and sector strategies, activity designs and implementation; (2) to increase awareness of issues of people with disabilities both within USAID programs and in host countries; (3) to engage other U.S. government agencies, host country counterparts, governments, implementing organizations and other donors in fostering a climate of nondiscrimination against people with disabilities; and (4) to support international advocacy for people with disabilities. The full text of the policy paper can be found at the following website: http://www.usaid.gov/about/disability/DISABPOL.FIN.html.
- (b) USAID therefore requires that the recipient not discriminate against people with disabilities in the implementation of USAID funded programs and that it make every effort to comply with the objectives of the USAID Disability Policy in performing the program under this grant or cooperative agreement. To that end and to the extent it can accomplish this goal within the scope of the program objectives, the recipient should demonstrate a comprehensive and consistent approach for including men, women and children with disabilities.

A.12.2 EXECUTIVE ORDER ON TERRORISM FINANCING (FEB 2002)

The Contractor/Recipient is reminded that U.S. Executive Orders and U.S. law prohibits transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the responsibility of the contractor/recipient to ensure compliance with these Executive Orders and laws. This provision must be included in all subcontracts/subawards issued under this contract/agreement.

A.12.3 FOREIGN GOVERNMENT DELEGATIONS TO INTERNATIONAL CONFERENCES (JAN 2002)

Funds in this [agreement, amendment] may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as provided in ADS Mandatory Reference "Guidance on Funding Foreign Government Delegations to International Conferences" or as approved by the AO.

-End of Schedule-

7.42

Attachment B **PROGRAM DESCRIPTION**

The Recipient program description titled Malaria Control in Mainland Tanzania and Zanzibar Tanzania submitted to USAID/Tanzania on December 2, 2006 is hereby attached (attachment B) and made a part of this award.

ATTACHMENT C

STANDARD PROVISIONS FOR U.S., NONGOVERNMENTAL ORGANIZATIONS

I. MANDATORY STANDARD PROVISIONS FOR U.S. NONGOVERNMENTAL RECIPIENTS

1. APPLICABILITY OF 22 CFR PART 226 (May 2005)

- a. All provisions of 22 CFR Part 226 and all Standard Provisions attached to this agreement are applicable to the recipient and to subrecipients which meet the definition of "Recipient" in Part 226, unless a section specifically excludes a subrecipient from coverage. The recipient shall assure that subrecipients have copies of all the attached standard provisions.
- b. For any subawards made with Non-US subrecipients the Recipient shall include the applicable "Standard Provisions for Non-US Nongovernmental Recipients." Recipients are required to ensure compliance with monitoring procedures in accordance with OMB Circular A-133.

[END OF PROVISION]

2. INELIGIBLE COUNTRIES (MAY 1986)

Unless otherwise approved by the USAID Agreement Officer, funds will only be expended for assistance to countries eligible for assistance under the Foreign Assistance Act of 1961, as amended, or under acts appropriating funds for foreign assistance.

[END OF PROVISION]

3. NONDISCRIMINATION (MAY 1986)

(This provision is applicable when work under the cooperative agreement is performed in the U.S. or when employees are recruited in the U.S.)

No U.S. citizen or legal resident shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity funded by this award on the basis of race, color, national origin, age, handicap, or sex.

[END OF PROVISION]

4. NONLIABILITY (NOVEMBER 1985)

USAID does not assume liability for any third party claims for damages arising out of this award.

[END OF PROVISION]

5. AMENDMENT (NOVEMBER 1985)

The award may be amended by formal modifications to the basic award document or by means of an exchange of letters between the Agreement Officer and an appropriate official of the recipient.

[END OF PROVISION]

6. NOTICES (NOVEMBER 1985)

Any notice given by USAID or the recipient shall be sufficient only if in writing and delivered in person, mailed, or cabled as follows:

To the USAID Agreement Officer, at the address specified in the award.

To recipient, at recipient's address shown in the award or to such other address designated within the award

Notices shall be effective when delivered in accordance with this provision, or on the effective date of the notice, whichever is later.

[END OF PROVISION]

7. SUBAGREEMENTS (June 1999)

Subrecipients, subawardees, and contractors have no relationship with USAID under the terms of this agreement. All required USAID approvals must be directed through the recipient to USAID.

[END OF PROVISION]

8. OMB APPROVAL UNDER THE PAPERWORK REDUCTION ACT (December 2003)

*Information collection requirements imposed by this cooperative agreement are covered by OMB approval number 0412-0510; the current expiration date is 04/30/2005. The Standard Provisions containing the requirement and an estimate of the public reporting burden (including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information) are

Standard Provision
Air Travel and Transportation

Burden Estimate
1 (hour)

Ocean Shipment of Goods	.5
Patent Rights	5
Publications	.5
Negotiated Indirect Cost Rates -	
(Predetermined and Provisional)	1
Voluntary Population Planning	.5
Protection of the Individual as a	1
Research Subject	
22 CFR 226	Burden Estimate
22 CFR 226.4049 Procurement	
of Goods and Services	1
22 CFR 226.3036	
Property Standards	1.5

Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, may be sent to the Office of Procurement, Policy Division (M/OP/P) U.S. Agency for International Development, Washington, DC 20523-7801 and to the Office of Management and Budget, Paperwork Reduction Project (0412-0510), Washington, D.C 20503.

[END OF PROVISION]

9. USAID ELIGIBILITY RULES FOR GOODS AND SERVICES (April 1998)

(This provision is not applicable to goods or services which the recipient provides with private funds as part of a cost-sharing requirement, or with Program Income generated under the award.)

- Ineligible and Restricted Goods and Services: USAID's policy on ineligible and a. restricted goods and services is contained in ADS Chapter 312.
 - (1) Ineligible Goods and Services. Under no circumstances shall the recipient procure any of the following under this award:
 - (i) Military equipment,
 - (ii) Surveillance equipment,
 - (iii) Commodities and services for support of police or other law enforcement activities,
 - (iv) Abortion equipment and services,
 - Luxury goods and gambling equipment, or (v)
 - Weather modification equipment. (vi)
 - (2) Ineligible Suppliers. Funds provided under this award shall not be used to procure any goods or services furnished by any firms or individuals whose name

appears on the "Lists of Parties Excluded from Federal Procurement and Nonprocurement Programs." USAID will provide the recipient with a copy of these lists upon request.

- (3) Restricted Goods. The recipient shall not procure any of the following goods and services without the prior approval of the Agreement Officer:
 - (i) Agricultural commodities,
 - (ii) Motor vehicles,
 - (iii) Pharmaceuticals,
 - (iv) Pesticides,
 - (v) Used equipment,
 - (vi) U.S. Government-owned excess property, or
 - (vii) Fertilizer.

Prior approval will be deemed to have been met when:

- (i) the item is of U.S. source/origin;
- (ii) the item has been identified and incorporated in the program description or schedule of the award (initial or revisions), or amendments to the award; and
- (iii) the costs related to the item are incorporated in the approved budget of the award.

Where the item has not been incorporated into the award as described above, a separate written authorization from the Agreement Officer must be provided before the item is procured.

- b. Source and Nationality: The eligibility rules for goods and services based on source and nationality are divided into two categories. One applies when the total procurement element during the life of the award is over \$250,000, and the other applies when the total procurement element during the life of the award is not over \$250,000, or the award is funded under the Development Fund for Africa (DFA) regardless of the amount. The total procurement element includes procurement of all goods (e.g., equipment, materials, supplies) and services. Guidance on the eligibility of specific goods or services may be obtained from the Agreement Officer. USAID policies and definitions on source, origin and nationality are contained in 22 CFR Part 228, Rules on Source, Origin and Nationality for Commodities and Services Financed by the Agency for International Development, which is incorporated into this Award in its entirety.
 - (1) For DFA funded awards or when the total procurement element during the life of this award is valued at \$250,000 or less, the following rules apply:

- (i) The authorized source for procurement of all goods and services to be reimbursed under the award is USAID Geographic Code 935, "Special Free World," and such goods and services must meet the source, origin and nationality requirements set forth in 22 CFR Part 228 in accordance with the following order of preference:
 - (A) The United States (USAID Geographic Code 000),
 - (B) The Cooperating Country,
 - (C) USAID Geographic Code 941, and
 - (D) USAID Geographic Code 935.
- (ii) Application of order of preference: When the recipient procures goods and services from other than U.S. sources, under the order of preference in paragraph (b)(1)(i) above, the recipient shall document its files to justify each such instance. The documentation shall set forth the circumstances surrounding the procurement and shall be based on one or more of the following reasons, which will be set forth in the Recipient's documentation:
 - (A) The procurement was of an emergency nature, which would not allow for the delay attendant to soliciting U.S. sources,
 - (B) The price differential for procurement from U.S. sources exceeded by 50% or more the delivered price from the non-U.S. source,
 - (C) Compelling local political considerations precluded consideration of U.S. sources,
 - (D) The goods or services were not available from U.S. sources, or
 - (E) Procurement of locally available goods and services, as opposed to procurement of U.S. goods and services, would best promote the objectives of the Foreign Assistance program under the award.
- (2) When the total procurement element exceeds \$250,000 (unless funded by DFA), the following applies: Except as may be specifically approved or directed in advance by the Agreement Officer, all goods and services financed with U.S. dollars, which will be reimbursed under this award must meet the source, origin and nationality requirements set forth in 22 CFR Part 228 for the authorized geographic code specified in the schedule of this award. If none is specified, the authorized source is Code 000, the United States.
- c. Printed or Audio-Visual Teaching Materials: If the effective use of printed or audio-visual teaching materials depends upon their being in the local language and if such materials are intended for technical assistance projects or activities financed by USAID in whole or in part and if other funds including U.S.-owned or U.S.-controlled local

currencies are not readily available to finance the procurement of such materials, local language versions may be procured from the following sources, in order of preference:

- (1) The United States (USAID Geographic Code 000),
- (2) The Cooperating Country,
- (3) "Selected Free World" countries (USAID Geographic Code 941), and
- (4) "Special Free World" countries (USAID Geographic Code 899).
- d. If USAID determines that the recipient has procured any of these goods or services under this award contrary to the requirements of this provision, and has received payment for such purposes, the Agreement Officer may require the recipient to refund the entire amount of the purchase.

This provision must be included in all subagreements which include procurement of goods or services which total over \$5,000.

[END OF PROVISION]

10. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS (January 2004)

- a. The recipient agrees to notify the Agreement Officer immediately upon learning that it or any of its principals:
 - (1) Are presently excluded or disqualified from covered transactions by any Federal department or agency;
 - (2) Have been convicted within the preceding three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects your present responsibility;
 - (3) Are presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b); and

- (4) Have had one or more public transactions (Federal, State, or local) terminated for cause or default within the preceding three years.
- b. The recipient agrees that, unless authorized by the Agreement Officer, it will not knowingly enter into any subagreements or contracts under this cooperative agreement with a person or entity that is included on the Excluded Parties List System (http://epls.arnet.gov). The recipient further agrees to include the following provision in any subagreements or contracts entered into under this award:

DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION (DECEMBER 2003)

The recipient/contractor certifies that neither it nor its principals is presently excluded or disqualified from participation in this transaction by any Federal department or agency.

c. The policies and procedures applicable to debarment, suspension, and ineligibility under USAID-financed transactions are set forth in 22 CFR Part 208.

[END OF PROVISION]

11. DRUG-FREE WORKPLACE (January 2004)

- a. The recipient agrees that it will publish a drug-free workplace statement and provide a copy to each employee who will be engaged in the performance of any Federal award. The statement must
 - (1) Tell the employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in its workplace;
 - (2) Specify the actions the recipient will take against employees for violating that prohibition; and
 - (3) Let each employee know that, as a condition of employment under any award, he or she
 - (i) Must abide by the terms of the statement, and
 - (ii) Must notify you in writing if he or she is convicted for a violation of a criminal drug statute occurring in the workplace, and must do so no more than five calendar days after the conviction.
- b. The recipient agrees that it will establish an ongoing drug-free awareness program to inform employees about
 - (i) The dangers of drug abuse in the workplace;

- (ii) Your policy of maintaining a drug-free workplace;
- (iii) Any available drug counseling, rehabilitation and employee assistance programs; and
- (iv) The penalties that you may impose upon them for drug abuse violations occurring in the workplace.
- c. Without the Agreement Officer's expressed written approval, the policy statement and program must be in place as soon as possible, no later than the 30 days after the effective date of this award or the completion date of this award, whichever occurs first.
- d. The recipient agrees to immediately notify the Agreement Officer if an employee is convicted of a drug violation in the workplace. The notification must be in writing, identify the employee's position title, the number of each award on which the employee worked. The notification must be sent to the Agreement Officer within ten calendar days after the recipient learns of the conviction.
- e. Within 30 calendar days of learning about an employee's conviction, the recipient must either
 - (1) Take appropriate personnel action against the employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973 (29 USC 794), as amended, or
 - (2) Require the employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for these purposes by a Federal, State or local health, law enforcement, or other appropriate agency.
- f. The policies and procedures applicable to violations of these requirements are set forth in 22 CFR Part 210.

[END OF PROVISION]

12. EQUAL PROTECTION OF THE LAWS FOR FAITH-BASED AND COMMUNITY ORGANIZATIONS (February 2004)

a. The recipient may not discriminate against any beneficiary or potential beneficiary under this award on the basis of religion or religious belief. Accordingly, in providing services supported in whole or in part by this agreement or in its outreach activities related to such services, the recipient may not discriminate against current or prospective program beneficiaries on the basis of religion, a religious belief, a refusal to hold a religious belief, or a refusal to actively participate in a religious practice;

- b. The Federal Government must implement Federal programs in accordance with the Establishment Clause and the Free Exercise Clause of the First Amendment to the Constitution. Therefore, if the recipient engages in inherently religious activities, such as worship, religious instruction, and proselytization, it must offer those services at a different time or location from any programs or services directly funded by this award, and participation by beneficiaries in any such inherently religious activities must be voluntary.
- c. If the recipient makes subawards under this agreement, faith-based organizations should be eligible to participate on the same basis as other organizations, and should not be discriminated against on the basis of their religious character or affiliation.

[END OF PROVISION]

13. IMPLEMENTATION OF E.O. 13224 -- EXECUTIVE ORDER ON TERRORIST FINANCING (March 2002)

The Recipient is reminded that U.S. Executive Orders and U.S. law prohibits transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the recipient to ensure compliance with these Executive Orders and laws. This provision must be included in all contracts/subawards issued under this agreement.

[END OF PROVISION]

14. MARKING UNDER USAID-FUNDED ASSISTANCE INSTRUMENTS (December 2005)

(a) Definitions

Commodities mean any material, article, supply, goods or equipment, excluding recipient offices, vehicles, and non-deliverable items for recipient's internal use, in administration of the USAID funded grant, cooperative agreement, or other agreement or subagreement.

Principal Officer means the most senior officer in a USAID Operating Unit in the field, e.g., USAID Mission Director or USAID Representative. For global programs managed from Washington but executed across many countries, such as disaster relief and assistance to internally displaced persons, humanitarian emergencies or immediate post conflict and political crisis response, the cognizant Principal Officer may be an Office Director, for example, the Directors of USAID/W/Office of Foreign Disaster Assistance and Office of Transition Initiatives. For non-presence countries, the cognizant Principal Officer is the Senior USAID officer in a regional USAID Operating Unit responsible for the non-presence country, or in the absence of such a responsible operating unit, the Principal U.S Diplomatic Officer in the non-presence country exercising delegated authority from USAID.

Programs mean an organized set of activities and allocation of resources directed toward a common purpose, objective, or goal undertaken or proposed by an organization to carry out the responsibilities assigned to it.

Projects include all the marginal costs of inputs (including the proposed investment) technically required to produce a discrete marketable output or a desired result (for example, services from a fully functional water/sewage treatment facility).

Public communications are documents and messages intended for distribution to audiences external to the recipient's organization. They include, but are not limited to, correspondence, publications, studies, reports, audio visual productions, and other informational products; applications, forms, press and promotional materials used in connection with USAID funded programs, projects or activities, including signage and plaques; Web sites/Internet activities; and events such as training courses, conferences, seminars, press conferences and so forth.

Subrecipient means any person or government (including cooperating country government) department, agency, establishment, or for profit or nonprofit organization that receives a USAID subaward, as defined in 22 C.F.R. 226.2.

Technical Assistance means the provision of funds, goods, services, or other foreign assistance, such as loan guarantees or food for work, to developing countries and other USAID recipients, and through such recipients to subrecipients, in direct support of a development objective – as opposed to the internal management of the foreign assistance program.

USAID Identity (Identity) means the official marking for the United States Agency for International Development (USAID), comprised of the USAID logo or seal and new brandmark, with the tagline that clearly communicates that our assistance is "from the American people." The USAID Identity is available on the USAID website at www.usaid.gov/branding and USAID provides it without royalty, license, or other fee to recipients of USAID-funded grants, or cooperative agreements, or other assistance awards

(b) Marking of Program Deliverables

- (1) All recipients must mark appropriately all overseas programs, projects, activities, public communications, and commodities partially or fully funded by a USAID grant or cooperative agreement or other assistance award or subaward with the USAID Identity, of a size and prominence equivalent to or greater than the recipient's, other donor's, or any other third party's identity or logo.
- (2) The Recipient will mark all program, project, or activity sites funded by USAID, including visible infrastructure projects (for example, roads, bridges, buildings) or other programs, projects, or activities that are physical in nature (for example, agriculture, forestry, water management) with the USAID Identity. The Recipient should erect temporary signs or plaques early in the construction or implementation phase. When

construction or implementation is complete, the Recipient must install a permanent, durable sign, plaque or other marking.

- (3) The Recipient will mark technical assistance, studies, reports, papers, publications, audio-visual productions, public service announcements, Web sites/Internet activities and other promotional, informational, media, or communications products funded by USAID with the USAID Identity.
- (4) The Recipient will appropriately mark events financed by USAID, such as training courses, conferences, seminars, exhibitions, fairs, workshops, press conferences and other public activities, with the USAID Identity. Unless directly prohibited and as appropriate to the surroundings, recipients should display additional materials, such as signs and banners, with the USAID Identity. In circumstances in which the USAID Identity cannot be displayed visually, the recipient is encouraged otherwise to acknowledge USAID and the American people's support.
- (5) The Recipient will mark all commodities financed by USAID, including commodities or equipment provided under humanitarian assistance or disaster relief programs, and all other equipment, supplies, and other materials funded by USAID, and their export packaging with the USAID Identity.
- (6) The Agreement Officer may require the USAID Identity to be larger and more prominent if it is the majority donor, or to require that a cooperating country government's identity be larger and more prominent if circumstances warrant, and as appropriate depending on the audience, program goals, and materials produced.
- (7) The Agreement Officer may require marking with the USAID Identity in the event that the recipient does not choose to mark with its own identity or logo.
- (8) The Agreement Officer may require a pre-production review of USAID-funded public communications and program materials for compliance with the approved Marking Plan.
- (9) Subrecipients. To ensure that the marking requirements "flow down" to subrecipients of subawards, recipients of USAID funded grants and cooperative agreements or other assistance awards will include the USAID-approved marking provision in any USAID funded subaward, as follows:

"As a condition of receipt of this subaward, marking with the USAID Identity of a size and prominence equivalent to or greater than the recipient's, subrecipient's, other donor's or third party's is required. In the event the recipient chooses not to require marking with its own identity or logo by the subrecipient, USAID may, at its discretion, require marking by the subrecipient with the USAID Identity."

(10) Any 'public communications', as defined in 22 C.F.R. 226.2, funded by USAID, in which the content has not been approved by USAID, must contain the following disclaimer:

"This study/report/audio/visual/other information/media product (specify) is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of [insert recipient name] and do not necessarily reflect the views of USAID or the United States Government."

(11) The recipient will provide the Cognizant Technical Officer (CTO) or other USAID personnel designated in the grant or cooperative agreement with two copies of all program and communications materials produced under the award. In addition, the recipient will submit one electronic or one hard copy of all final documents to USAID's Development Experience Clearinghouse.

(c) Implementation of marking requirements.

- (1) When the grant or cooperative agreement contains an approved Marking Plan, the recipient will implement the requirements of this provision following the approved Marking Plan.
- (2) When the grant or cooperative agreement does not contain an approved Marking Plan, the recipient will propose and submit a plan for implementing the requirements of this provision within [*Agreement Officer fill-in*] days after the effective date of this provision. The plan will include:
 - (i) A description of the program deliverables specified in paragraph (b) of this provision that the recipient will produce as a part of the grant or cooperative agreement and which will visibly bear the USAID Identity.
 - (ii) the type of marking and what materials the applicant uses to mark the program deliverables with the USAID Identity,
 - (iii) when in the performance period the applicant will mark the program deliverables, and where the applicant will place the marking,
- (3) The recipient may request program deliverables not be marked with the USAID Identity by identifying the program deliverables and providing a rationale for not marking these program deliverables. Program deliverables may be exempted from USAID marking requirements when:
 - (i) USAID marking requirements would compromise the intrinsic independence or neutrality of a program or materials where independence or neutrality is an inherent aspect of the program and materials;

- (ii) USAID marking requirements would diminish the credibility of audits, reports, analyses, studies, or policy recommendations whose data or findings must be seen as independent;
- (iii) USAID marking requirements would undercut host-country government "ownership" of constitutions, laws, regulations, policies, studies, assessments, reports, publications, surveys or audits, public service announcements, or other communications better positioned as "by" or "from" a cooperating country ministry or government official;
- (iv) USAID marking requirements would impair the functionality of an item;
- (v) USAID marking requirements would incur substantial costs or be impractical;
- (vi) USAID marking requirements would offend local cultural or social norms, or be considered inappropriate;
- (vii) USAID marking requirements would conflict with international law.
- (4) The proposed plan for implementing the requirements of this provision, including any proposed exemptions, will be negotiated within the time specified by the Agreement Officer after receipt of the proposed plan. Failure to negotiate an approved plan with the time specified by the Agreement Officer may be considered as noncompliance with the requirements is provision.

(d) Waivers.

- (1) The recipient may request a waiver of the Marking Plan or of the marking requirements of this provision, in whole or in part, for each program, project, activity, public communication or commodity, or, in exceptional circumstances, for a region or country, when USAID required marking would pose compelling political, safety, or security concerns, or when marking would have an adverse impact in the cooperating country. The recipient will submit the request through the Cognizant Technical Officer. The Principal Officer is responsible for approvals or disapprovals of waiver requests.
- (2) The request will describe the compelling political, safety, security concerns, or adverse impact that require a waiver, detail the circumstances and rationale for the waiver, detail the specific requirements to be waived, the specific portion of the Marking Plan to be waived, or specific marking to be waived, and include a description of how program materials will be marked (if at all) if the USAID Identity is removed. The request should also provide a rationale for any use of recipient's own identity/logo or that of a third party on materials that will be subject to the waiver.
- (3) Approved waivers are not limited in duration but are subject to Principal Officer review at any time, due to changed circumstances.

- (4) Approved waivers "flow down" to recipients of subawards unless specified otherwise. The waiver may also include the removal of USAID markings already affixed, if circumstances warrant.
- (5) Determinations regarding waiver requests are subject to appeal to the Principal Officer's cognizant Assistant Administrator. The recipient may appeal by submitting a written request to reconsider the Principal Officer's waiver determination to the cognizant Assistant Administrator.
- (e) Non-retroactivity. The requirements of this provision do not apply to any materials, events, or commodities produced prior to January 2, 2006. The requirements of this provision do not apply to program, project, or activity sites funded by USAID, including visible infrastructure projects (for example, roads, bridges, buildings) or other programs, projects, or activities that are physical in nature (for example, agriculture, forestry, water management) where the construction and implementation of these are complete prior to January 2, 2006 and the period of the cooperative agreement does not extend past January 2, 2006.

[END OF PROVISION]

15. REGULATIONS GOVERNING EMPLOYEES (AUGUST 1992)

(The following applies to the recipient's employees working in the cooperating country under the agreement who are not citizens of the cooperating country.)

- a. The recipient's employees shall maintain private status and may not rely on local U.S. Government offices or facilities for support while under this cooperative agreement.
- b. The sale of personal property or automobiles by recipient employees and their dependents in the foreign country to which they are assigned shall be subject to the same limitations and prohibitions which apply to direct-hire USAID personnel employed by the Mission, including the rules contained in 22 CFR Part 136, except as this may conflict with host government regulations.
- c. Other than work to be performed under this award for which an employee is assigned by the recipient, no employee of the recipient shall engage directly or indirectly, either in the individual's own name or in the name or through an agency of another person, in any business, profession, or occupation in the foreign countries to which the individual is assigned, nor shall the individual make loans or investments to or in any business, profession or occupation in the foreign countries to which the individual is assigned.
- d. The recipient's employees, while in a foreign country, are expected to show respect for its conventions, customs, and institutions, to abide by its applicable laws and regulations, and not to interfere in its internal political affairs.

- e. In the event the conduct of any recipient employee is not in accordance with the preceding paragraphs, the recipient's chief of party shall consult with the USAID Mission Director and the employee involved and shall recommend to the recipient a course of action with regard to such employee.
- f. The parties recognize the rights of the U.S. Ambassador to direct the removal from a country of any U.S. citizen or the discharge from this cooperative agreement award of any third country national when, in the discretion of the Ambassador, the interests of the United States so require.
- g. If it is determined, either under (e) or (f) above, that the services of such employee should be terminated, the recipient shall use its best efforts to cause the return of such employee to the United States, or point of origin, as appropriate.

[END OF PROVISION]

16. CONVERSION OF UNITED STATES DOLLARS TO LOCAL CURRENCY (NOVEMBER 1985)

(This provision applies when activities are undertaken outside the United States.)

Upon arrival in the Cooperating Country, and from time to time as appropriate, the recipient's chief of party shall consult with the Mission Director who shall provide, in writing, the procedure the recipient and its employees shall follow in the conversion of United States dollars to local currency. This may include, but is not limited to, the conversion of currency through the cognizant United States Disbursing Officer or Mission Controller, as appropriate.

[END OF PROVISION]

17. USE OF POUCH FACILITIES (AUGUST 1992)

(This provision applies when activities are undertaken outside the United States.)

a. Use of diplomatic pouch is controlled by the Department of State. The Department of State has authorized the use of pouch facilities for USAID recipients and their employees as a general policy, as detailed in items (1) through (6) below. However, the final decision regarding use of pouch facilities rest with the Embassy or USAID Mission. In consideration of the use of pouch facilities, the recipient and its employees agree to indemnify and hold harmless, the Department of State and USAID for loss or damage occurring in pouch transmission:

- (1) Recipients and their employees are authorized use of the pouch for transmission and receipt of up to a maximum of .9 kgs per shipment of correspondence and documents needed in the administration of assistance programs.
- (2) U.S. citizen employees are authorized use of the pouch for personal mail up to a maximum of .45 kgs per shipment (but see (a)(3) below).
- (3) Merchandise, parcels, magazines, or newspapers are not considered to be personal mail for purposes of this standard provision and are not authorized to be sent or received by pouch.
- (4) Official and personal mail pursuant to a.1. and 2. above sent by pouch should be addressed as follows:

Name of individual or organization (followed by letter symbol "G")
City Name of post (USAID/____)
Agency for International Development
Washington, D.C. 20523-0001

- (5) Mail sent via the diplomatic pouch may not be in violation of U.S. Postal laws and may not contain material ineligible for pouch transmission.
- (6) Recipient personnel are NOT authorized use of military postal facilities (APO/FPO). This is an Adjutant General's decision based on existing laws and regulations governing military postal facilities and is being enforced worldwide.
- b. The recipient shall be responsible for advising its employees of this authorization, these guidelines, and limitations on use of pouch facilities.
- Specific additional guidance on Recipient use of pouch facilities in accordance with this standard provision is available from the Post Communication Center at the Embassy or USAID Mission.

[END OF PROVISION]

18. INTERNATIONAL AIR TRAVEL AND TRANSPORTATION (JUNE 1999)

(This provision is applicable when costs for international travel or transportation will be paid for with USAID funds. This provision is not applicable if the recipient is providing for travel with private funds as part of a cost-sharing requirement, or with Program Income generated under the award.)

a. PRIOR BUDGET APPROVAL

In accordance with OMB Cost Principles, direct charges for foreign travel costs are allowable only when each foreign trip has received prior budget approval. Such approval will be deemed to have been met when:

- (1) the trip is identified. Identification is accomplished by providing the following information: the number of trips, the number of individuals per trip, and the destination country(s).
- (2) the information noted at (a)(1) above is incorporated in: the proposal, the program description or schedule of the award, the implementation plan (initial or revisions), or amendments to the award; and
- (3) the costs related to the travel are incorporated in the approved budget of the award.

The Agreement Officer may approve travel which has not been incorporated in writing as required by paragraph (a)(2). In such case, a copy of the Agreement Officer's approval must be included in the agreement file.

b. NOTIFICATION

- (1) As long as prior budget approval has been met in accordance with paragraph (a) above, a separate Notification will not be necessary unless:
 - (i) the primary purpose of the trip is to work with USAID Mission personnel, or
 - (ii) the recipient expects significant administrative or substantive programmatic support from the Mission.

Neither the USAID Mission nor the Embassy will require Country Clearance of employees or contractors of USAID Recipients.

- (2) Where notification is required in accordance with paragraph (1)(i) or (ii) above, the recipient will observe the following standards:
 - (i) Send a written notice to the cognizant USAID Technical Office in the Mission. If the recipient's primary point of contact is a Technical Officer in USAID/W, the recipient may send the notice to that person. It will be the responsibility of the USAID/W Technical Officer to forward the notice to the field.
 - (ii) The notice should be sent as far in advance as possible, but at least 14 calendar days in advance of the proposed travel. This notice may be sent by fax or e-mail. The recipient should retain proof that notification was made.

- (iii) The notification shall contain the following information: the award number, the cognizant Technical Officer, the traveler's name (if known), date of arrival, and the purpose of the trip.
- (iv) The USAID Mission will respond only if travel has been denied. It will be the responsibility of the Technical Officer in the Mission to contact the recipient within 5 working days of having received the notice if the travel is denied. If the recipient has not received a response within the time frame, the recipient will be considered to have met these standards for notification, and may travel.
- (v) If a subrecipient is required to issue a Notification, as per this section, the subrecipient may contact the USAID Technical Officer directly, or the prime may contact USAID on the subrecipient's behalf.

c. SECURITY ISSUES

Recipients are encouraged to obtain the latest Department of State Travel Advisory Notices before travelling. These Notices are available to the general public and may be obtained directly from the State Department, or via Internet.

Where security is a concern in a specific region, recipients may choose to notify the US Embassy of their presence when they have entered the country. This may be especially important for long-term posting.

d. USE OF U.S.-OWNED LOCAL CURRENCY

Travel to certain countries shall, at USAID's option, be funded from U.S.-owned local currency. When USAID intends to exercise this option, USAID will either issue a U.S. Government S.F. 1169, Transportation Request (GTR) which the Recipient may exchange for tickets, or issue the tickets directly. Use of such U.S.-owned currencies will constitute a dollar charge to this cooperative agreement.

e. THE FLY AMERICA ACT

The Fly America Act (49 U.S.C. 40118) requires that all air travel and shipments under this award must be made on U.S. flag air carriers to the extent service by such carriers is available. The Administrator of General Services Administration (GSA) is authorized to issue regulations for purposes of implementation. Those regulations may be found at 41 CFR part 301, and are hereby incorporated by reference into this award.

f. COST PRINCIPLES

The recipient will be reimbursed for travel and the reasonable cost of subsistence, post differentials and other allowances paid to employees in international travel status in accordance with the recipient's applicable cost principles and established policies and practices which are uniformly applied to federally financed and other activities of the Recipient.

If the recipient does not have written established policies regarding travel costs, the standard for determining the reasonableness of reimbursement for overseas allowance will be the Standardized Regulations (Government Civilians, Foreign Areas), published by the U.S. Department of State, as from time to time amended. The most current subsistence, post differentials, and other allowances may be obtained from the Agreement Officer.

g. SUBAWARDS.

This provision will be included in all subawards and contracts which require international air travel and transportation under this award.

[END OF PROVISION]

19. OCEAN SHIPMENT OF GOODS (JUNE 1999)

(This provision is applicable for awards and subawards for \$100,000 or more and when goods purchased with funds provided under this award are transported to cooperating countries on ocean vessels whether or not award funds are used for the transportation.)

- a. At least 50% of the gross tonnage of all goods purchased under this agreement and transported to the cooperating countries shall be made on privately owned U.S. flag commercial ocean vessels, to the extent such vessels are available at fair and reasonable rates for such vessels.
- b. At least 50% of the gross freight revenue generated by shipments of goods purchased under this agreement and transported to the cooperating countries on dry cargo liners shall be paid to or for the benefit of privately owned U.S. flag commercial ocean vessels to the extent such vessels are available at fair and reasonable rates for such vessels.
- c. When U.S. flag vessels are not available, or their use would result in a significant delay, the Recipient may request a determination of non-availability from the USAID Transportation Division, Office of Procurement, Washington, D.C. 20523, giving the basis for the request which will relieve the Recipient of the requirement to use U.S. flag vessels for the amount of tonnage included in the determination. Shipments made on non-free world ocean vessels are not reimbursable under this cooperative agreement.
- d. The recipient shall send a copy of each ocean bill of lading, stating all of the carrier's charges including the basis for calculation such as weight or cubic measurement, covering a shipment under this agreement to:

U.S. Department of Transportation, Maritime Administration, Division of National Cargo, 400 7th Street, S.W., Washington, DC 20590, and U.S. Agency for International Development, Office of Procurement, Transportation Division 1300 Pennsylvania Avenue, N.W. Washington, DC 20523-7900

- e. Shipments by voluntary nonprofit relief agencies (i.e., PVOs) shall be governed by this standard provision and by USAID Regulation 2, "Overseas Shipments of Supplies by Voluntary Nonprofit Relief Agencies" (22 CFR Part 202).
- f. Shipments financed under this cooperative agreement must meet applicable eligibility requirements set out in 22 CFR 228.21.

[END OF PROVISION]

20. LOCAL PROCUREMENT (April 1998)

(This provision applies when activities are undertaken outside the United States.)

- a. Financing local procurement involves the use of appropriated funds to finance the procurement of goods and services supplied by local businesses, dealers or producers, with payment normally being in the currency of the cooperating country.
- b. Locally financed procurements must be covered by source and nationality waivers as set forth in 22 CFR 228, Subpart F, except as provided for in mandatory standard provision, "USAID Eligibility Rules for Goods and Services," or when one of the following exceptions applies:
 - (1) Locally available commodities of U.S. origin, which are otherwise eligible for financing, if the value of the transaction is estimated not to exceed \$100,000 exclusive of transportation costs.
 - (2) Commodities of geographic code 935 origin if the value of the transaction does not exceed the local currency equivalent of \$5,000.
 - (3) Professional Services Contracts estimated not to exceed \$250,000.
 - (4) Construction Services Contracts estimated not to exceed \$5,000,000.
 - (5) Commodities and services available only in the local economy (no specific per transaction value applies to this category). This category includes the following items:
 - (i) Utilities including fuel for heating and cooking, waste disposal and trash collection;

- (ii) Communications telephone, telex, fax, postal and courier services;
- (iii) Rental costs for housing and office space;
- (iv) Petroleum, oils and lubricants for operating vehicles and equipment;
- (v) Newspapers, periodicals and books published in the cooperating country;
- (vi) Other commodities and services and related expenses that, by their nature or as a practical matter, can only be acquired, performed, or incurred in the cooperating country, e.g., vehicle maintenance, hotel accommodations, etc.
- c. The coverage on ineligible and restricted goods and services in the mandatory standard provision entitled, "USAID Eligibility Rules for Goods and Services," also apply to local procurement.
 - d. This provision will be included in all subagreements where local procurement of goods or services is a supported element.

[END OF PROVISION]

21. VOLUNTARY POPULATION PLANNING ACTIVITIES – MANDATORY REQUIREMENTS (MAY 2006)

Requirements for Voluntary Sterilization Programs

(1) None of the funds made available under this award shall be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any individual to practice sterilization.

Prohibition on Abortion-Related Activities:

(1) No funds made available under this award will be used to finance, support, or be attributed to the following activities: (i) procurement or distribution of equipment intended to be used for the purpose of inducing abortions as a method of family planning; (ii) special fees or incentives to any person to coerce or motivate them to have abortions; (iii) payments to persons to perform abortions or to solicit persons to undergo abortions; (iv) information, education, training, or communication programs that seek to promote abortion as a method of family planning; and (v) lobbying for or against abortion. The term "motivate", as it relates to family planning assistance, shall not be construed to prohibit the provision, consistent with local law, of information or counseling about all pregnancy options.

(2) No funds made available under this award will be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilizations as a means of family planning. Epidemiologic or descriptive research to assess the incidence, extent or consequences of abortions is not precluded.

22. NEGOTIATED INDIRECT COST RATES - PROVISIONAL (Nonprofit) (April 1998)

- a. Provisional indirect cost rates shall be established for each of the recipient's accounting periods during the term of this award. Pending establishment of revised provisional or final rates, allowable indirect costs shall be reimbursed at the rates, on the bases, and for the periods shown in the schedule of the award.
- b. Within the earlier of 30 days after receipt of the A-133 audit report or nine months after the end of the audit period, the recipient shall submit to the cognizant agency for audit the required OMB Circular A-133 audit report, proposed final indirect cost rates, and supporting cost data. If USAID is the cognizant agency or no cognizant agency has been designated, the recipient shall submit four copies of the audit report, along with the proposed final indirect cost rates and supporting cost data, to the Overhead, Special Costs, and Closeout Branch, Office or Procurement, USAID, Washington, DC 20523-7802. The proposed rates shall be based on the recipient's actual cost experience during that fiscal year. Negotiations of final indirect cost rates shall begin soon after receipt of the recipient's proposal.
- c. Allowability of costs and acceptability of cost allocation methods shall be determined in accordance with the applicable cost principles.
- d. The results of each negotiation shall be set forth in a written indirect cost rate agreement signed by both parties. Such agreement is automatically incorporated into this award and shall specify (1) the agreed upon final rates, (2) the bases to which the rates apply, (3) the fiscal year for which the rates apply, and (4) the items treated as direct costs. The agreement shall not change any monetary ceiling, award obligation, or specific cost allowance or disallowance provided for in this award.
- e. Pending establishment of final indirect cost rate(s) for any fiscal year, the recipient shall be reimbursed either at negotiated provisional rates or at billing rates acceptable to the Agreement Officer, subject to appropriate adjustment when the final rates for the fiscal year are established. To prevent substantial overpayment or underpayment, the provisional or billing rates may be prospectively or retroactively revised by mutual agreement.
- f. Failure by the parties to agree on final rates is a 22 CFR 226.90 dispute.

[END OF PROVISION]

23. PARTICIPANT TRAINING (April 1998)

- a. Definition: A participant is any non-U.S. individual being trained under this award outside of that individual's home country.
- b. Application of ADS Chapter 253: Participant training under this award shall comply with the policies established in ADS Chapter 253, Participant Training, except to the extent that specific exceptions to ADS 253 have been provided in this award with the concurrence of the Office of International Training.
- c. Orientation: In addition to the mandatory requirements in ADS 253, recipients are strongly encouraged to provide, in collaboration with the Mission training officer, predeparture orientation and orientation in Washington at the Washington International Center. The latter orientation program also provides the opportunity to arrange for home hospitality in Washington and elsewhere in the United States through liaison with the National Council for International Visitors (NCIV). If the Washington orientation is determined not to be feasible, home hospitality can be arranged in most U.S. cities if a request for such is directed to the Agreement Officer, who will transmit the request to NCIV through EGAT/ED/PT.

[END OF PROVISION]

24. TITLE TO AND CARE OF PROPERTY (COOPERATING COUNTRY TITLE) (NOVEMBER 1985)

- a. Except as modified by the schedule of this cooperative agreement, title to all equipment, materials and supplies, the cost of which is reimbursable to the recipient by USAID or by the cooperating country, shall at all times be in the name of the cooperating country or such public or private agency as the cooperating country may designate, unless title to specified types or classes of equipment is reserved to USAID under provisions set forth in the schedule of this award. All such property shall be under the custody and control of recipient until the owner of title directs otherwise or completion of work under this award or its termination, at which time custody and control shall be turned over to the owner of title or disposed of in accordance with its instructions. All performance guarantees and warranties obtained from suppliers shall be taken in the name of the title owner.
- b. The recipient shall maintain and administer in accordance with sound business practice a program for the maintenance, repair, protection, and preservation of Government property so as to assure its full availability and usefulness for the performance of this cooperative agreement. The recipient shall take all reasonable steps to comply with all appropriate directions or instructions which the Agreement Officer may prescribe as reasonably necessary for the protection of the Government property.
- c. The recipient shall prepare and establish a program, to be approved by the appropriate USAID Mission, for the receipt, use, maintenance, protection, custody and care of equipment, materials and supplies for which it has custodial responsibility, including the

establishment of reasonable controls to enforce such program. The recipient shall be guided by the following requirements:

- (1) Property Control: The property control system shall include but not be limited to the following:
 - (i) Identification of each item of cooperating country property acquired or furnished under the award by a serially controlled identification number and by description of item. Each item must be clearly marked "Property of (insert name of cooperating country)."
 - (ii) The price of each item of property acquired or furnished under this award.
 - (iii) The location of each item of property acquired or furnished under this award.
 - (iv) A record of any usable components which are permanently removed from items of cooperating country property as a result of modification or otherwise.
 - (v) A record of disposition of each item acquired or furnished under the award.
 - (vi) Date of order and receipt of any item acquired or furnished under the award.
 - (vii) The official property control records shall be kept in such condition that at any stage of completion of the work under this award, the status of property acquired or furnished under this award may be readily ascertained. A report of current status of all items of property acquired or furnished under the award shall be submitted yearly concurrently with the annual report.
- (2) Maintenance Program: The recipient's maintenance program shall be consistent with sound business practice, the terms of the award, and provide for:
 - (i) disclosure of need for and the performance of preventive maintenance,
 - (ii) disclosure and reporting of need for capital type rehabilitation, and
 - (iii) recording of work accomplished under the program:
 - (A) Preventive maintenance Preventive maintenance is maintenance generally performed on a regularly scheduled basis to prevent the occurrence of defects and to detect and correct minor defects before they result in serious consequences.

- (B) Records of maintenance The recipient's maintenance program shall provide for records sufficient to disclose the maintenance actions performed and deficiencies discovered as a result of inspections.
- (C) A report of status of maintenance of cooperating country property shall be submitted annually concurrently with the annual report.

d. Risk of Loss:

- (1) The recipient shall not be liable for any loss of or damage to the cooperating country property, or for expenses incidental to such loss or damage except that the recipient shall be responsible for any such loss or damage (including expenses incidental thereto):
 - (i) Which results from willful misconduct or lack of good faith on the part of any of the recipient's directors or officers, or on the part of any of its managers, superintendents, or other equivalent representatives, who have supervision or direction of all or substantially all of the recipient's business, or all or substantially all of the recipient's operation at any one plant, laboratory, or separate location in which this award is being performed;
 - (ii) Which results from a failure on the part of the recipient, due to the willful misconduct or lack of good faith on the part of any of its directors, officers, or other representatives mentioned in (i) above:
 - (A) to maintain and administer, in accordance with sound business practice, the program for maintenance, repair, protection, and preservation of cooperating country property as required by (i) above, or
 - (B) to take all reasonable steps to comply with any appropriate written directions of the Agreement Officer under (b) above;
 - (iii) For which the recipient is otherwise responsible under the express terms designated in the schedule of this award;
 - (vi) Which results from a risk expressly required to be insured under some other provision of this award, but only to the extent of the insurance so required to be procured and maintained, or to the extent of insurance actually procured and maintained, whichever is greater; or
 - (v) Which results from a risk which is in fact covered by insurance or for which the Recipient is otherwise reimbursed, but only to the extent of such insurance or reimbursement;

- (vi) Provided, that, if more than one of the above exceptions shall be applicable in any case, the recipient's liability under any one exception shall not be limited by any other exception.
- (2) The recipient shall not be reimbursed for, and shall not include as an item of overhead, the cost of insurance, or any provision for a reserve, covering the risk of loss of or damage to the cooperating country property, except to the extent that USAID may have required the recipient to carry such insurance under any other provision of this award.
- (3) Upon the happening of loss or destruction of or damage to the cooperating country property, the recipient shall notify the Agreement Officer thereof, shall take all reasonable steps to protect the cooperating country property from further damage, separate the damaged and undamaged cooperating country property, put all the cooperating country property in the best possible order, and furnish to the Agreement Officer a statement of:
 - (i) The lost, destroyed, or damaged cooperating country property;
 - (ii) The time and origin of the loss, destruction, or damage;
 - (iii) All known interests in commingled property of which the cooperating country property is a part; and
 - (iv) The insurance, if any, covering any part of or interest in such commingled property.
- (4) The recipient shall make repairs and renovations of the damaged cooperating country property or take such other action as the Agreement Officer directs.
- (5) In the event the recipient is indemnified, reimbursed, or otherwise compensated for any loss or destruction of or damage to the cooperating country property, it shall use the proceeds to repair, renovate or replace the cooperating country property involved, or shall credit such proceeds against the cost of the work covered by the award, or shall otherwise reimburse USAID, as directed by the Agreement Officer. The recipient shall do nothing to prejudice USAID's right to recover against third parties for any such loss, destruction, or damage, and upon the request of the Agreement Officer, shall, at the Governments expense, furnish to USAID all reasonable assistance and cooperation (including assistance in the prosecution of suits and the execution of instruments or assignments in favor of the Government) in obtaining recovery.
- e. Access: USAID, and any persons designated by it, shall at all reasonable times have access to the premises wherein any cooperating country property is located, for the purpose of inspecting the cooperating country property.

- f. Final Accounting and Disposition of Cooperating Country Property: Within 90 days after completion of this award, or at such other date as may be fixed by the Agreement Officer, the recipient shall submit to the Agreement Officer an inventory schedule covering all items of equipment, materials and supplies under the recipient's custody, title to which is in the cooperating country or public or private agency designated by the cooperating country, which have not been consumed in the performance of this award. The recipient shall also indicate what disposition has been made of such property.
- g. Communications: All communications issued pursuant to this provision shall be in writing.

[END OF PROVISION]

25. PUBLIC NOTICES (MARCH 2004)

It is USAID's policy to inform the public as fully as possible of its programs and activities. The recipient is encouraged to give public notice of the receipt of this award and, from time to time, to announce progress and accomplishments. Press releases or other public notices should include a statement substantially as follows:

"The U.S. Agency for International Development administers the U.S. foreign assistance program providing economic and humanitarian assistance in more than 120 countries worldwide."

The recipient may call on USAID's Bureau for Legislative and Public Affairs for advice regarding public notices. The recipient is requested to provide copies of notices or announcements to the cognizant technical officer and to USAID's Bureau for Legislative and Public Affairs as far in advance of release as possible.

[END OF PROVISION]

26. REPORTING OF FOREIGN TAXES (March 2006)

- a. The recipient must annually submit a report by April 16 of the next year.
- b. Contents of Report. The report must contain:
 - (i) Contractor/recipient name.
 - (ii) Contact name with phone, fax and email.
 - (iii) Agreement number(s).

- (iv) Amount of foreign taxes assessed by a foreign government [each foreign government must be listed separately] on commodity purchase transactions valued at \$500 or more financed with U.S. foreign assistance funds under this agreement during the prior U.S. fiscal year.
- (v) Only foreign taxes assessed by the foreign government in the country receiving U.S. assistance is to be reported. Foreign taxes by a third party foreign government are not to be reported. For example, if an assistance program for Lesotho involves the purchase of commodities in South Africa using foreign assistance funds, any taxes imposed by South Africa would not be reported in the report for Lesotho (or South Africa).
- (vi) Any reimbursements received by the Recipient during the period in (iv) regardless of when the foreign tax was assessed and any reimbursements on the taxes reported in (iv) received through March 31.
- (vii) Report is required even if the recipient did not pay any taxes during the report period.
 - (viii) Cumulative reports may be provided if the recipient is implementing more than one program in a foreign country.
- c. Definitions. For purposes of this clause:
 - (i) "Agreement" includes USAID direct and country contracts, grants, cooperative agreements and interagency agreements.
 - (ii) "Commodity" means any material, article, supply, goods, or equipment.
 - (iii) "Foreign government" includes any foreign governmental entity.
 - (iv) "Foreign taxes" means value-added taxes and custom duties assessed by a foreign government on a commodity. It does not include foreign sales taxes.
- d. Where. Submit the reports to: [insert address and point of contact at the Embassy, Mission or FM/CMP as appropriate. see b. below] [optional with a copy to]
- e. Subagreements. The recipient must include this reporting requirement in all applicable subcontracts, subgrants and other subagreements.
 - e. For further information see http://www.state.gov/m/rm/c10443.htm.

[END OF PROVISION]

27 FOREIGN GOVERNMENT DELEGATIONS TO INTERNATIONAL CONFERENCES (January 2002)

Funds in this agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as provided in ADS Mandatory Reference "Guidance on Funding Foreign Government Delegations to International Conferences or as approved by the Agreement Officer.

These provisions also must be included in the Standard Provisions of any new grant or cooperative agreement to a public international organization or a U.S. or non-U.S. non-governmental organization financed with FY04 HIV/AIDS funds or modification to an existing grant or cooperative agreement that adds FY04 HIV/AIDS.

[END OF PROVISION]

28 USAID DISABULITY POLICYABILITY POLICY - ASSISTANCE (DECEMBER 2004)

a. The objectives of the USAID Disability Policy are (1) to enhance the attainment of United States foreign assistance program goals by promoting the participation and equalization of opportunities of individuals with disabilities in USAID policy, country and sector strategies, activity designs and implementation; (2) to increase awareness of issues of people with disabilities both within USAID programs and in host countries; (3) to engage other U.S. government agencies, host country counterparts, governments, implementing organizations and other donors in fostering a climate of nondiscrimination against people with disabilities; and (4) to support international advocacy for people with disabilities. The full text of the policy paper can be found at the following website:

http://www.usaid.gov/about/disability/DISABPOL.FIN.html

b. USAID therefore requires that the recipient not discriminate against people with disabilities in the implementation of USAID funded programs and that it make every effort to comply with the objectives of the USAID Disability Policy in performing the program under this grant or cooperative agreement. To that end and to the extent it can accomplish this goal within the scope of the program objectives, the recipient should demonstrate a comprehensive and consistent approach for including men, women and children with disabilities.

[END OF PROVISION]

[END OF STANDARD PROVISIONS]

RFA No. USAID-TANZANIA-07-001-RFA

RTI Application No. 0280700.218

Malaria Control in Mainland Tanzania and Zanzibar

Volume I Technical Application

Submitted to

USAID/Tanzania
ATTN: Kenneth P. LuePhang,
Samuel S. Kiranga,
and Muna Kundya
2140 Dar es Salaam Place
Washington, DC 20521-2140
E-mail: kluephang@usaid.gov,
skiranga@usaid.gov,
and mkundya@usaid.gov

Submitted by

RTI International 3040 Cornwallis Road Research Triangle Park, NC 27709-2194

December 4, 2006

Administrative Point of Contact: Christiana Campbell

RTI Agreement Officer
Office of Research Contracts
RTI International
3040 Cornwallis Road

Research Triangle Park, NC 27709-2194 Telephone: (202) 728-1956

Fax: (202) 728X-1975 E-mail: ccampbell@rti.org



RTI International Application No. 0280700.218

Unless disclosure is required by the Freedom of Information Act, 5 U.S.C. 552, as amended (the Act), as determined by Freedom of Information (FOI) officials of the USAID/Tanzania, data contained in this application that have been identified by the offeror as containing restricted information shall not be used or disclosed except for evaluation purposes.

The offeror acknowledges that the USAID/Tanzania may not be able to withhold a record (data, document, etc.) nor deny access to a record requested pursuant to the Act and that the USAID/Tanzania's FOI officials must make that determination. The offeror hereby agrees that the government is not liable for disclosure if the USAID/Tanzania has determined that disclosure is required by the Act.

If an agreement is awarded to the offeror as a result of, or in connection with, the submission of this application, the government shall have the right to use or disclose the data to the extent provided in the agreement. Applications not resulting in an agreement remain subject to the Act.

The offeror also agrees that the government is not liable for disclosure or use of unmarked data and may use or disclose the data for any purpose, including the release of the information pursuant to requests under the Act.

The data subject to this restriction are contained in the entire application.

RTI International is a trade name of Research Triangle Institute.

1. Technical Approach

1.1 Overall Understanding and Approach

RTI International is pleased to present this application to USAID for Malaria Control in Mainland Tanzania and Zanzibar. We have assembled a distinguished team of partners to provide the range of expertise required for all functional and technical areas identified in the RFA. Our team has worked in Mainland Tanzania and Zanzibar and has experience, strong commitment, and worldwide reputations for outstanding performance. The partners bring distinct areas of functional and technical expertise.

RTI has a thorough, detailed understanding of USAID's objectives for this program. The overall objective of USAID's Malaria Control in Mainland Tanzania and Zanzibar is to help NMCP and ZMCP to conduct indoor residual spraying (IRS) and other malaria control services. RTI will work under the direction of and in full collaboration with NMCP in the Mainland and ZMCP in Zanzibar.

Our partners are **Durham University** and **Mennonite Economic Development Associates** (**MEDA**). Durham University will continue its technical and financial management support for larviciding as part of the Urban Malaria Control Program in Dar es Salaam. MEDA will assist the Zanzibar Malaria Control Program in developing new modalities and channels for distributing long-lasting insecticide-treated bednets (LLINs) in Zanzibar. Both of these organizations have records of success in their fields in Tanzania and proven commitment to transferring skills, responsibility, and authority to their counterpart institutions.

This project team is committed to transferring skills and knowledge to our partner institutions and building capacity and local ownership of the program. RTI has trained sprayer operators and supervisors in Zanzibar drawing from the local community and local institutions with the aim that they will be able to conduct IRS without assistance in the future. Durham University excels at nurturing local talent as part of its activities in Tanzania and is building a cadre of professionals in malaria control that will benefit the nation for years to come. MEDA trains and promotes local businesses and entrepreneurs to ensure a lasting and sustainable market structure for the marketing of nets, using both commercial and voucher schemes.

RTI is committed to maintaining the highest technical standards. All IRS activities are conducted strictly within the limits of relevant environmental law and treaties (22 CFR 216, Zanzibari and Tanzanian laws and regulations, and regional and international treaties such as Basel and Stockholm), using open and transparent procedures for pesticide selection, mitigating risks, ensuring safe storage and inventory control of pesticides, safe disposal of waste, and thorough monitoring of all spray activities and the health of all sprayer staff and community members.

RTI is committed to working with all partners in malaria control as a team. USAID has set a high standard for cooperation with local, national, and international partners in malaria. This project will meet with partners regularly and coordinate activities with them under the guidance of NMCP and ZMCP.

USAID and the President's Malaria Initiative have supported both the Zanzibar IRS program and the Dar es Salaam Urban Malaria Control Program through contracts with RTI International, with results all concerned are proud of. If awarded this cooperative agreement we will improve upon this success by using the lessons learned from Zanzibar's first round of IRS to enhance cost

effectiveness in 2007, build local capacity and sustainability, and use it as an example for other IRS programs across Africa.

1.2 Indoor Residual Spraying in Zanzibar

Under the guidance of the Chief of Party, Dr. Mahdi Ramsan, and working jointly with ZMCP, the project will organize, implement, and evaluate a second cycle of IRS in the Zanzibar islands covering 200,000 households in a period of no more than 10 weeks starting in late January 2007. RTI has demonstrated capacity to conduct IRS in Zanzibar by spraying 199,344 houses in the first round of IRS in 2006, in work performed through the Integrated Vector Management Task Order (IVM).

Under the IVM Task Order, RTI and ZMCP have continued working closely to prepare for the January 2007 IRS round. Schedules and mechanisms are in place for procurement, organizing logistics, hiring spray personnel, storing and transporting commodities, and improving entomological surveillance. The ZMOH's Health Education Unit will start the IRS communication campaign in December 2006 to ensure that all islanders are aware of the second round of indoor spraying and are informed of all aspects of the IRS program. By January 2007, sprayer supervisors and ZMCP staff will have finalized detailed work plans outlining the schedule and sequence of the IRS campaign including updating the geographic reconnaissance maps for all villages to be sprayed.

RTI and ZMCP will make a smooth transition to conducting work under the new agreement and ensure that IRS operations are able to proceed in January 2007. The project will continue to focus on transferring the knowledge and skills necessary to implement IRS in Zanzibar and build local capacity to implement this activity without outside assistance in the future. The project will also incorporate knowledge and lessons learned from Round 1 into Round 2 to further improve cost-effectiveness.

We will conduct refresher training for experienced sprayer operators, supervisors, and support staff, and full training for new hires. While in Round 1 the training of trainers was done by representatives of the pesticide vendor, in Round 2 it will be done by Zanzibari staff under project supervision. The sprayer operators and supervisors will undergo physical exams to monitor their health and screen out any who may be at excess risk for conducting spray operations, particularly pregnant women. As part of the broader communication campaign and to generate enthusiasm and acceptance of IRS, a well-publicized launch ceremony will kick off the beginning of spray operations.

When spraying begins in the latter part of January, data will be recorded daily, checked in the field and rechecked after being collated to be submitted in weekly reports to ZMCP and USAID. By recording and checking on this schedule any problems with technique, equipment, community acceptance, etc. can be recognized and addressed immediately. Operators report each house as sprayed or unsprayed. Reasons for not spraying are cited such as illness in the home, no one present, refused. Presence and usage of insecticide-treated nets (ITNs) in the household are also recorded.

Working with the Health Education Unit, the project will conduct qualitative research on perceptions, misconceptions, and attitudes of the population concerning IRS, including focus group discussions among both participants and non-participants to understand how IRS is perceived and to better target communications and outreach in the future.

During spray operations equipment will be checked daily and unused pesticide will be recorded and stored securely. Equipment will be cleaned daily (or more frequently if crews move locations or feel it is required). Personal protective equipment will be inspected and cleaned daily. Any damaged or worn equipment will be replaced. At the end of spraying operations all

equipment will be recaptured, inventoried, and placed in secure storage. The supervisors will dispose of waste in compliance with the manufacturer's guidelines and with RTI's Environmental Compliance Checklist. At the end of operations, staff will receive their final health checkup. Before, during, and after spraying, the project will conduct ongoing entomological surveys of malaria transmission intensity and vector susceptibility to insecticides to establish efficacy of spraying and compare to the baseline from Round 1.

RTI will carry out IRS in accordance with the laws, regulations and, guidelines of the Government of Zanzibar, USAID, and WHO concerning pesticides. As in the first spray round, the second round will make use of the pesticide formulation Icon WP. Vector susceptibility will be monitored to ascertain any resistance to the pesticide. The project will actively pursue all due diligence to ensure that commodities are stored and maintained safely and securely and assure that pilferage or leakage do not take place. Secure storage facilities and systems are in place from Round 1. RTI will conduct and document an Environmental Compliance Audit as part of Round 2 operations.

The project will provide and train IRS staff in the use of Global Positioning System (GPS) tools to create maps indicating longitude, latitude and altitude (LLA) of every household sprayed and not sprayed on the islands and all health facilities. We will procure the necessary software and provide training in its use. All maps and training will be available to ZMCP for use in epidemic response, future IRS activities, and other malaria programming.

The team will update and expand the Field Manual for Spray Operations adapted in Round 1 using local language and context. This helpful tool will be made available for other programs implementing IRS in the region.

Following the completion of Round 2 in March, RTI will work with ZMCP to evaluate the impact of the program to date and determine next steps for malaria vector control in Zanzibar. Using data from ongoing vector surveillance and disease monitoring, the project will recommend whether further IRS rounds are advisable and, if so, recommend appropriate pesticides to use. In the event that other means of vector control are found to be more advisable (nets, larviciding, combinations, etc.) the project will make recommendations in a timely manner.

1.3 IRS and Improved Epidemic Response in Mainland Tanzania

1.3.1 Indoor Residual Spraying

RTI and its partners will work with the NMCP to train, organize, implement, supervise and evaluate a pre-emptive IRS campaign in Muleba District. The campaign will be carried out in two rounds, covering 40,000 households over a 10-week period in each round. We will work closely with district officials in Muleba to establish their capacity for IRS planning and implementation. Muleba District employs around 40 primary health care workers who have been trained in the theory and practice of IRS as a malaria control strategy. District technicians are able to conduct limited monitoring and evaluation activities. The campaign will make use of these trained workers, and RTI will identify additional training needs and fill gaps where necessary.

The IRS campaign will be carried out in accordance with WHO recommendations and US and Tanzanian laws and regulations. Rational pesticide selection is crucial to a successful IRS program, and the choice of insecticide depends on having current data on vector susceptibility to a range of insecticides approved for use in IRS. It is also important to collect information on vector identity, population dynamics, and the frequency of infective bites (the "entomological inoculation rate") to characterize baseline conditions against which future reductions in malaria transmission will be measured. RTI and its partners will work with the NMCP to establish capabilities at the central and district levels for conducting basic field entomological surveillance.

RTI will also work closely with the NMCP, Ministry of Health, Ministry of Agriculture, the Tropical Pesticides Research Institute, the National Environment Management Council, WHO, and other governmental and non-governmental stakeholders to select the inseciticide(s) that will be used for IRS in Muleba. We will define a selection process that is evidence-based and complies with Tanzanian government regulations, international and regional agreements, WHO guidelines, and recommendations for pesticide selection in USAID's Programmatic Environmental Assessment for Malaria Vector Control. Once completed for Muleba District, the process should also establish procedural precedents to guide pesticide selection for IRS in other epidemic-prone areas in mainland Tanzania.

RTI will conduct a logistics assessment to estimate the operational requirements of the IRS program in Muleba, including required quantities of insecticide, number of spray operators, compression sprayers (including spares and repair kits), and protective clothing, and arrangements for storage, transport, water and fuel, waste disposal, and other operational details. RTI will work closely with the District Medical Officer and Malaria Focal Person during this exercise, so they are thoroughly familiar with the plans being made and to establish their capabilities to plan future IRS campaigns. As there is currently no warehouse or transport capacity in Muleba for IRS, RTI will work with the District officials to determine locally appropriate, safe, and secure approaches to insecticide and equipment transport and storage.

Based on IRS commodity requirements generated from logistics assessment, RTI will procure compression sprayers, spare parts, sprayer maintenance kits, insecticide, personal protective equipment (PPE), and any other necessary equipment for the IRS campaign. Compression sprayers will be WHO-approved and registered in Tanzania, as required by Tanzanian regulations. PPE will be purchased according to WHO recommendations, and procured insecticide will be registered in Tanzania and formulated to WHO specifications.

To comply with US Code of Federal Regulation Title 22 Section 216 (22 CFR 216) requirements concerning USAID support of pesticide use, RTI will adhere to requirements documented in the Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP) prepared for Muleba District under the Integrated Vector Management Project in 2006. RTI will meet with government and civil society stakeholders and conduct field visits to provide operational and policy requirements and recommendations to fulfill CFR 216 requirements.

RTI and its partners will conduct all of the activities described above in a manner that builds local capacity to manage and continue IRS operations. If awarded this agreement, RTI will also work with the NMCP and MOH to define appropriate roles for the Ifakara Health Research and Development Centre (IHRDC) and World Vision/Tanzania in support of mainland IRS. IHRDC has strong technical capabilities for malaria surveillance and research and is in a good position to support improvements in the NMCP's entomological and epidemiological surveillance systems. World Vision/Tanzania is active in Muleba District and has supported earlier IRS activities on a modest scale; it will be in a good position to offer operational support, local staff, assist with health education and communications, and provide other useful capabilities.

1.3.2 Enhancing Capacity for Epidemic Response

Malaria control requires not only strong planning and management capacity for IRS operations, but also requires capacity to gather, modify, and interpret data to make informed choices about where and when malaria control activities should take place. To this end, RTI and its partners will support the NMCP, Muleba, and the additional 24 epidemic-prone districts in developing the capacity to anticipate, detect, prevent, and respond to epidemics.

Under the IVM task order, RTI consultant Dr. Patricia Graves prepared a draft plan for strengthening the NMCP's malaria surveillance system and analyzing the distribution

("stratification") of malaria risk in epidemic prone districts. The NMCP concurred in the basic outline of the plan, which included the following steps.

- Revise the draft epidemic response manual to reflect the need for pre-emptive spraying, establishing entomological monitoring priorities, and other recommendations from entomologic experts in Tanzania.
- Improve and support the widespread use of the Malaria District Data Base (MDDB).
 Refine the number and definition of MDDB indicators; identify a local programmer to
 incorporate Infectious Disease Surveillance and Response (IDSR), IRS indicators, and
 rapid diagnostic test results into the MDDB; simplify processes by which local users can
 modifying thresholds, recompute the epidemic index by season, facilitate the
 enhancement of climate information through web-based remotely sensed data, and
 incorporate automatic system backups.
- Once the MDDB is improved, revise the MDDB draft manual to reflect changes in the MDDB interface and inputs. RTI will then provide support to accelerate the use of MDDB in all epidemic-prone districts, providing training for Malaria Focal Persons, technical assistance in reviewing thresholds, and additional support as required.

RTI and its partners will acquire digital GPS maps showing district and regional boundaries for mapping malaria risk and will work with relevant authorities to update these and incorporate climate and disease data. The team will create a systematic, interactive GPS database for use in forecasting epidemics and targeting IRS and other interventions. To further enhance the usefulness of this mapping tool, the project will provide and train sprayer operators and supervisors in the use of Global Positioning System (GPS) tools to create maps indicating longitude, latitude, and altitude (LLA) of every household sprayed and not sprayed as well as all health facilities. RTI will procure the necessary software and provide training in its use. All maps and training will be available to NMCP for use in epidemic response, future IRS activities, and other malaria programming.

An accelerated MDDB rollout will not only help districts identify where and when an epidemic is occurring, but it will also assist in prioritization of malaria prevention activities in districts, divisions, and wards. RTI will work with NMCP officials to select appropriate epidemic risk indicators in the regular epidemic monitoring system. This exercise will establish goals for epidemic prevention, identify the administrative areas (districts, divisions, wards) that will be prioritized, and choose an appropriate epidemic risk indicator (i.e., incidence, infant mortality, child mortality) to be coupled with the epidemic risk index in the epidemic monitoring system.

RTI will also work with the NMCP and MOH to define an appropriate role for the IHRDC in this component of the project. IHRDC has strong technical capabilities for malaria surveillance and research and is in a good position to support improvements in the NMCP's malaria surveillance system.

1.4 Larviciding Interventions for the Mainland

The Urban Malaria Control Program (UMCP) in Dar es Salaam is a collaborative effort to suppress malaria transmission in a large urban population on a sustainable, scaleable basis. The UMCP is overseen by the City Medical Office of Health, with technical support from Durham University and financial support from USAID. Because of its key role as model for malaria control in urban areas in Africa, additional technical and research support is provided by the Ifakara Health Research and Development Centre (IHRDC), a Tanzanian health research and policy advice trust with financial support from the Bill and Melinda Gates Foundation and the Wellcome Trust. The goal of the UMCP is to establish a comprehensive malaria control program

that is effective, stable, and managed by local government structures in Dar es Salaam. Furthermore, the Dar es Salaam UMCP is designed as a training and developmental hub from which similar programs can be disseminated to urban centers across Tanzania and beyond in PMI countries across Africa. In practice, the UMCP is focused on establishing a city-wide, community-based mosquito control program that eliminates and treats mosquito breeding sites to reduce malaria transmission. This intervention complements existing national initiatives to increase the availability and use of long-lasting insecticide-treated nets, improve case management, and provide malaria prophylaxis to pregnant women.

The UMCP began gathering baseline data in 15 wards in 2004 and started larval control interventions in three wards in March 2006. The program conducts routine monitoring to track the abundance of anopheline larvae, adult mosquito density (human landing rates), and malaria prevalence. As of September 2006, results demonstrated that the interventions have substantially reduced anopheline larval abundance. While indicators of impact on malaria prevalence remain to be analyzed, surveys of adult mosquito densities indicate wards in which larviciding has been conducted have >90% fewer *Anopheles gambiae* than wards in which larviciding has not yet been used. As this is the primary vector of malaria in the city, project staff expect that the reduction in adult mosquito density will also yield a corresponding reduction in malaria transmission intensity.

1.5 Establish and Promote a System for the Regular Distribution of LLINs in Zanzibar

The ZMCP has expressed interest in exploring means of enhancing the distribution and availability of LLINs in Zanzibar through market mechanisms, such as the vendors and vouchers program being implemented in mainland Tanzania. Increasing LLIN availability and usage is critical to the long-term success of the malaria control program in Zanzibar, and to the President's Malaria Initiative, since the intent is to help the ZMCP transition from heavy reliance on IRS to greater or complete reliance on LLINs over the medium term. RTI has engaged Mennonite Economic Development Associates (MEDA) to lead this component of the proposed project, based on their experience in designing and implementing the mainland program.

Working with the ZMCP, MEDA will design and implement a creative voucher scheme that will ensure all pregnant women and children under five will be able to receive a free LLIN via a private sector distribution mechanism. This model will stimulate private sector involvement in selling LLINs beyond the end of donor funding.

MEDA has been leading the Tanzanian National Voucher Scheme (TNVS), Hati Punguzo, a public-private partnership that has established and fostered commercial distribution networks for both subsidized and unsubsidized ITNs. Hati Punguzo—Swahili for discount vouchers—started in 2004 with pregnant women as the target population. Based on the early success of this first phase, the project received funding from USAID in June 2006 for a second phase targeting children under 5. Vouchers are delivered through the public health care system and redeemed for ITNs at a reduced price in commercial retail shops. MEDA's Hati Punguzo logistics team ensures that vouchers are printed, securely stored, entered into the project's MIS system, and subsequently tracked. In order to manage the Hati Punguzo process, MEDA developed a state-of-the-art tracking and security system. The latest in bar-code technology provides tracking functionality, while a registered watermark and a UV stamp reduce the potential for fraud. The tracking system is accompanied by an operations manual that details the correct procedure at each stage and for each transaction.

Through September 2006, over 1.3 million vouchers had been redeemed by MEDA through a commercial network involving 4,058 retailers and 206 wholesalers in all 21 regions of Tanzania. It is estimated that 80% of the participating retailers are in rural areas and most are new to the ITN business. In a recent external audit, it was found that 92% of all clinics in Tanzania had

vouchers in stock and that almost 85% of all pregnant women who received a voucher used it to buy an ITN.

Prior to the TNVS commercial network established by MEDA, rural populations lacked consistent and reliable access to nets. But by addressing demand and extending the supply chain, for the first time 70% of Tanzania's rural population can purchase a net from retail outlets within close proximity to their communities.

MEDA and ZMCP will design and procure vouchers specifically for Zanzibar and solely for acquiring an LLIN. The voucher will be a full cost voucher, i.e., the recipient of the voucher will receive an LLIN from a retailer at no extra cost or top up amount. MEDA and ZMCP will work together to engage wholesalers and retailers who will distribute LLINs both via the voucher program and commercially. MEDA/ZMCP will start distributing vouchers to reproductive and child health clinics based on past attendance records.

Wholesalers will receive a stock of LLINs in exchange for a negotiated deposit from the MEDA Regional Manager and/or ZMCP. Additional LLINs will make their way through wholesalers to retailers in exchange for payment in the form of vouchers or cash. For each voucher redeemed, the wholesaler will be paid a negotiated amount (a top up), some of which will make its way to the retailer as his or her regular commercial markup.

All vouchers will be entered into a database and a standard report will be produced monthly for ZMCP, which will facilitate behavior change targeting.

Apart from promoting an effective distribution mechanism, the voucher scheme is also expected to promote behavior change amongst the target group. Pregnant women and infant caretakers will be encouraged to actively seek out and acquire products that will improve their health and wellbeing. The commercial value of LLINs will be clearly evident and vouchers will be recognized as the discount mechanism. This should have lasting effects on the demand for LLINs, thus spurring continued private sector stocking and distribution.

MEDA will work closely with ZMCP to ensure that communities are sensitized to the net program and support it. Additionally, ZMCP will provide input into the development of private sector net distribution. The voucher system will help create and promote vibrant commercial sector involvement in net distribution. As this market develops and the link between LLIN wholesalers and retailers strengthens, this in turn will encourage the establishment of an LLIN market that will sustain beyond the end of donor funding.

1.6 Behavior Change Communications Campaign in Zanzibar

The Health Education Unit (HEU) is a capable organization established within the ZMOH. It has primary responsibility for the design, development, and implementation of health education activities and the Behavior Change Communication (BCC) component of all ZMOH disease control programs. During Round 1 of the ZMCP Indoor Residual Spraying program in 2006, the HEU organized radio spots, media coverage, billboards, sporting events, and a dramatic video to disseminate key messages in support of IRS. Health education staff also helped mobilize popular cooperation for indoor spraying via person-to-person advocacy with district leaders. This communications campaign was well received, and early feedback indicates that person-to-person advocacy was highly effective. The HEU will retain primary responsibility for the BCC function in future rounds of IRS.

Project partner MEDA has extensive experience in BCC and malaria in the Tanzanian Mainland and is well placed to identify and supervise local consultants and staff to assist the HEU in the review and strengthening of its BCC malaria component.

Under the proposed cooperative agreement, the project will strengthen the HEU's capacity and help improve malaria-related BCC as follows:

- The project will provide technical and financial support to a general review and update of the malaria communications strategy to ensure that it is current, comprehensive, efficient, and effective. The revised strategy will need to reflect the addition of IRS as an integral part of the malaria control program and changes in the long-term approach to increase and sustain LLIN ownership and usage.
- In January, MEDA will define the qualifications of a local individual whose job it will be to design and implement a review of the current BCC strategy, materials, and techniques. This consultant will work closely with HEU staff to complete the review.
- In March, following the review process, the project will convene a meeting of HEU and relevant stakeholders to consider the review and define action steps to fill identified gaps, revise materials, better focus messages on target audiences, and refine messages as appropriate.
- By mid May, the consultant will synthesize into a report specifically defined actions and tasks needed to improve the ZMCP's malaria communications program.

RTI will also purchase and convey selected equipment that the HEU needs to become more effective, including computers, printers, copiers, and audio and video recording and playback equipment and other materials necessary to develop communication materials and implement BCC activities.

1.7 School Health Malaria Education for Zanzibar

In 2005, Zanzibar's Ministry of Education (MoEd) and partners developed malaria educational packages for teachers and students at the primary and secondary school levels, disseminated these packages, and trained teachers in almost 200 schools in Pemba and Unguja with assistance from Italian Cooperation. The MoEd and the ZMCP have requested support for reviewing this program and identifying improvements. Working closely with the ZMCP, the ZMOH Health Education Unit, and the MoEd, the project team will undertake an evaluation of the 2005 malaria education activities. The team will evaluate the materials and training processes for appropriateness of content and language, effectiveness, retention, and other factors that can contribute to successful replication of the program.

The evaluation will recommend the revisions needed to produce a comprehensive package of age/grade appropriate malaria education materials such as posters, charts, leaflet and booklets or others based on the results of the evaluation and build upon the successes and lessons learned. This package would be used by teachers and by extension workers of the Health and Education sectors and be provided to all health facilities and schools. As resources allow, the project would support the MoEd in producing new materials and providing refresher training to all teachers first in public schools and then private schools. An outreach program for non-enrolled school-age children could also be developed in collaboration with MoEd.

1.8 Additional Technical Assistance to the ZMCP

RTI will work with the ZMCP to determine the best use of the resources provided under this component. One appropriate use of these funds is to update the Malaria Strategic Plan. Currently the Zanzibar Malaria Strategic Plan is out of date and does not include IRS. It needs to be reexamined taking into consideration the new data generated by IRS and other vector, environmental, epidemiological, and entomological monitoring conducted since the plan was made.

The plan should also reflect the anticipated transition from an emphasis on IRS to greater reliance on LLINs, as data indicate that vector conditions support this change in vector control strategy. This will be done in a deliberate, transparent, scientifically informed manner to ensure that IRS is not stopped prematurely and that LLIN distribution and use are at levels that can sustain the successes achieved by IRS. RTI will work to ensure that the actions contained within the Malaria Strategic Plan are within the reach of the resources and capacity of ZMCP to fulfill.

RTI will first assist ZMCP in identifying any remaining gaps in information that will be required for medium and long-term planning. When these gaps have been filled as much as possible within the resources available, the project will convene a planning session hosted by ZMCP and including all stakeholders in vector control in Zanzibar to examine what is known and provide inputs to ZMCP to make a new Malaria Strategic Plan.

Other options for use of these funds will also be considered, including supporting the revision of malaria educational materials and retraining teachers as described in *Section 1.7*.

1.9 Reporting

Upon award, Dr. Ramsan, Dr. Molteni, and Mr. O'Sullivan will consult with USAID/Tanzania's cognizant technical officer (CTO), NMCP and ZMCP managers to confirm routine procedures for satisfying the following reporting requirements:

- Financial reporting in accordance with 22 CFR 226, including quarterly reports of pipeline status and funds usage ("burn rate").
- Performance monitoring and reporting, to include
 - an Annual Implementation Plan (including work plan, management plan, and budget)
 - weekly, monthly, and quarterly performance reports
 - response reports and presentations
 - a final report.

RTI will establish routine reporting procedures, expected format and deadline for submission with the CTO, NMCP, and ZMCP. Due to the complexities of managing IRS programs, RTI will ensure that reports document operational, technical, and financial management of IRS activities, including achievements to date, programmatic impacts and lessons learned. In addition, to meeting USAID's reporting requirements, RTI proposes to submit spraying performance reports at the end of each round of spraying with a full assessment of the quality of work done, operational measures taken, environmental monitoring, and cost analysis of spraying activities.

The COP and Finance and Administrative Manager will review all financial data monthly and inform the Task Manager when trends demonstrate variations from budget or anomalies in the regular spending pattern. As the main point of contact in the home office, the Task Manager will provide technical input and ensure the in-country team fulfils its obligations in regards to submission and approval of an annual implementation plan, work plan, and performance monitoring reports (financial and technical quarterly and annual reports).

2. Monitoring and Evaluation

M&E systems are crucial to good project management and maximizing project impact. The RTI team will collect, analyze and report M&E data internally and externally to inform implementers, partners, USAID, and the NMCP and ZMCP on the progress and results of project activities.

This project is part of the US President's Malaria Initiative, the overall monitoring and evaluation of which is under the direction of the Centers for Disease Control and Prevention. RTI will review all of the proposed indicators, methods, and data sources described below with CDC, USAID, the NMCP and the ZMCP, and our implementation partners at the outset of this project, and will prepare a Performance Monitoring Plan on the basis of agreements reached in these discussions.

Specific approaches important to implementing effective, participatory M&E systems include: (1) consensus among partners on data and indicators most useful to inform management decisions, (2) efficient streamlined systems to report routine data as cost-effectively as possible, (3) locally-appropriate and sustainable information and communications systems and rational use of technology, (4) capacity built across all project staff to understand M&E and use data to monitor performance, and (5) providing regular feedback on the data and information provided from project staff and partners.

Project indicators will include standardized indicators consistent with the Foreign Assistance Standardized Program Structure and required for entry into the USAID FACTS database. In all malaria activities in Zanzibar and mainland Tanzania, RTI will work with the NMCP and ZMCP, national research institutions such as IHRDC and TPRI, and the CDC to acquire the entomological and epidemiological data necessary to assess program impact. Entomological data will guide decisions in intervention and pesticide selection, resistance management planning, and intervention locations. RTI will support distribution mapping of malaria vector species in Muleba District. RTI will also support the establishment of a vector control surveillance system, as well as an insectory on the Zanzibar islands where bioassay and susceptibility testing will be conducted.

The RTI team will provide USAID a detailed Performance Monitoring Plan (PMP) for review and approval. While recognizing that any M&E plan must be a living document, designed and used to continually support ongoing improvements to project implementation through empirical feedback on results, significant stability will be maintained in the project M&E plan to ensure comparable monitoring for most indicators of progress relative to consistent goals over the life of the project.

The M&E plan developed by the RTI team will comply with the following major regulatory elements:

- ongoing monitoring and compliance with 22 CFR 216 environmental procedures, including the PERSUAP prepared previously by RTI for compliance with USAID regulations, and relevant aspects of Tanzanian local law, the Basel Convention (concerning export and disposal of hazardous waste) and the Stockholm Convention (concerning use of Persistent Organic Pesticides)
- ongoing monitoring and reporting of program compliance with WHO technical standards for IRS.¹

M&E activities will collect routine program data and other information across sites and over time to inform project managers and other stakeholders of activity results with respect to planned targets. Routine data collection instruments, data management, and reporting will be driven by requirements of agreed-upon indicators. Data required to monitor a program on this scale are challenging, and include data collected at the household and facility levels, through routine

_

¹ WHO/CDS/WHOPES/2001.3 Malaria Vector Control: Insecticides for Indoor Spraying; WHO/CDS/WHOPES/GCDPP/2000.3 Rev.1 Manual for Indoor Spraying: Application of Residual Sprays for Vector Control.

surveillance of field sites, and via surveys. The RTI team has demonstrated its ability to meet these demands for IRS Round 1 in Zanzibar and for similar IRS programs in other countries. Building upon this experience, the RTI team will strengthen and simplify the existing project-specific information systems designed to manage the IRS program. RTI will use its significant developing country experience in health information and communication systems to develop appropriate, sustainable systems for data collection, management, and reporting.

The RTI team will also interpret routine information in the context of other data, such as assessments, to analyze and report fully on the significance of program results. All RTI partners will contribute to M&E through a system designed to operate at multiple levels in order to understand results and address the spectrum of stakeholder information needs.

The RTI team is committed to ensuring that M&E feedback occurs through user-friendly information and communications systems designed to support project team members' use of quality data to inform strategic decisions and improve implementation of activities. Regular participatory discussions with partners and stakeholders will include lessons learned from project challenges and successes, with implementation strategies, resource allocations, and realistic understandings of achievable goals adjusted if or as appropriate. Report output will include updated maps showing the locations of households sprayed and not sprayed, as well as results of a comprehensive census of bed net ownership and use.

The RTI team understands that, in addition to routine performance reporting, there will be unpredictable ad hoc requests for information requiring rapid response in the form of presentations, press releases, and other formats for use by the NCMP, ZMCP, and/or USAID/Tanzania for mass media communications. The ability to respond to such ad hoc requests requires information systems that anticipate information needs, contain accurate and updated information, and are flexible enough to respond to ad hoc query and reporting requirements. RTI has met this requirement successfully on other projects, most recently on the USAID Training Model Primary Providers in Iraq, through the use of well designed and maintained information systems supporting M&E.

2.1 M&E Management and Supporting Activities

The RTI COP will be primarily responsible for managing M&E and supporting activities in the field. RTI home office health M&E and information technology experts will provide remote support and short-term technical assistance in M&E system design and development of effective information systems for entering, managing, and reporting M&E data. The project's information system will be capable of accepting and presenting information on all activities under the project. Durham University will be responsible for collecting and managing data required to monitor larvicidal activities, and submitting it to the project's M&E system. RTI partner MEDA will be responsible for collecting and managing information regarding distribution of LLINs in Zanzibar and submitting it to the project's M&E system.

2.2 Reporting, Communications, and Harmonization

Routine reports will be submitted by our COP to the CTO weekly, monthly, and quarterly. Existing report formats of the NMCP and ZMCP will be retained. Formats for other reports will be determined in consultation with the CTO. All reports will be reviewed and approved by the CTO prior to release. Quarterly performance reports will be structured according to the results framework reviewed and approved by USAID/Tanzania, and will constitute the routine M&E reporting system. The last quarterly report of the year will summarize results and progress and will include final results indicator values for the year.

The RTI team will produce weekly and monthly reports of IRS activity. These reports will include updated values for IRS activity indicators and benchmarks, explanation and interpretation of this data, and a description of emerging project risks and adjustments that will be made in processes, resource allocation, or strategy. IRS reports to the NMCP, ZMCP, and USAID/Tanzania will include reports from the Malaria District Data Base (MDDB) and geographic information system (GIS) of households sprayed compared to targets, insecticide inventory figures, net ownership census data, and other information in formats similar to those produced by RTI during the first round.

Harmonization—using shared or compatible data standards and indicators, including data definitions, data types, coding systems, structures, and storage formats—requires ongoing efforts to develop, document, communicate, and promote common standards. The RTI team expects, for example, to work closely with the NMCP, ZMCP, MOH, and CDC to implement appropriate standards in project data and reporting support tools to facilitate data transfer between these systems. RTI will work with USAID, as requested, to develop useful and compatible data protocols to the extent needed.

2.3 Sources of Data

The primary source of data for IRS operations is the household visit form ("spray cards"). Household visit forms are completed by spray operators and are checked routinely by team leaders during the day's operations. Team leaders aggregate data from spray cards onto a daily summary form, which is then entered into the project's data base. Daily reports are generated from the system; supervisors review the progress and performance indicators for each team and take corrective action as needed. Summary data are reported weekly to the NCMP or ZMCP, and USAID. Other sources of primary data include the results of entomological monitoring (insecticide efficacy and bioasssays) to establish the efficacy of spraying operations.

RTI is planning improvements in information systems to support IRS operations in all countries using lessons learned from successful projects for the US National Institutes of Health (NIH), the Bill and Melinda Gates Foundation, and USAID. The RTI team will work with the NCMP and to improve the existing MDDB Excel spreadsheet database system, and if necessary to develop a database system more capable of safely managing the volume and complexity of expected data and producing the necessary variety of routine and ad hoc reports and queries.

Other secondary sources of information for comparison include the following:

- Health Management Information System (MTUHA), Ministry of Health
- Infectious Disease Surveillance Response System (IDRS), Ministry of Health
- Mapping Malaria Risk in Africa/Tanzania Essential Health Interventions Project.

The RTI team will provide appropriate handheld GPS units (e.g., GarminTM eTrex® Summit) and training in basic use to NMCP and ZMCP supervisors and spray operators. Spray teams will record the coordinates and altitude of each household sprayed and not sprayed on paper forms. Field teams will also record the coordinates and altitude of each medical facility. Geographic coordinates and altitudes for households and health facilities will be mapped and used to provide data for M&E and to produce detailed maps of households sprayed and not sprayed, and the location of health facilities. RTI proposes providing GIS software (ESRI ArcView) and related training to the NMCP and ZMCP to enable them to produce these maps. RTI will provide digital map data for Tanzania and Zanzibar including political boundaries to at least the district level, hydrography, transportation, drainage, populated places, and land cover (Landsat thematic mosaics).

GPS units and household coverage maps will also be used by field teams to complete a census of all households sprayed and not sprayed to collect data on ownership, status, and use of ITNs in Muleba and Zanzibar. Aggregated data recorded on paper forms will be used for project M&E and may be entered into the MDDB.

2.4 Illustrative Results Framework and Indicators

The outcomes or impacts of many project activities cannot be measured during the 1-year period of performance. Examples include measuring the sustainability of enhanced NMCP epidemic response capacity, the long-term viability of the system for distributing LLINs, the impact of increased capacity of the ZMCP and Health Education Unit of the MOH to plan and carry out behavioral change communication campaigns, and the impact of the new School Health Package on Malaria. In addition, external factors, such as climate, could have a significant effect on some impact indicators. Hence most project indicators are expected to measure outputs or outcomes.

Indicators have been divided into two separate and distinct groups. The first group of indicators is needed for project M&E and routine project performance reporting required by the project team and other stakeholders for monitoring specific project activities. This group will include the following indicators required for entry into the USAID FACTS database:

- number of houses sprayed with insecticide with USG support
- number of people trained in malaria treatment or prevention
- percentage of households in targeted area for indoor residual spraying that have been sprayed in the last 12 months.

The second group of indicators, operational performance indicators, will be used to constantly monitor the quality of the interventions as they occur. This monitoring will ensure that the program adheres to WHO's technical standards and USAID and Tanzania environmental compliance requirements. RTI will train program staff to use GPS and GIS to create maps of households and corresponding operational performance data.

Epidemiological indicators will be used to identify priority areas for preventive and reactive control interventions and assess program impact on malaria mortality and morbidity. Epidemiological data available from the Health Management Information System (HMIS) and the MDDB include malaria incidence in children less than 5 years of age, incidence in children 5 years of age and above, admissions from uncomplicated and severe malaria admissions, malaria deaths for uncomplicated and severe malaria, anemia in children less than five years of age, as well as lab statistics.

Entomological and epidemiological monitoring indicators will be incorporated into the Malaria Atlas for Tanzania.