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UGANDA INDOOR RESIDUAL SPRAYING (IRS) PROJECT QUARTERLY PERFORMANCE REPORT APRIL 1ST THROUGH JUNE 30TH, 2010



July 2010

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UGANDA INDOOR RESIDUAL SPRAYING (IRS) PROJECT QUARTERLY PERFORMANCE REPORT

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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Acronyms

Abt	Abt Associates, Inc
BCC	Behavior Change Communication
CDC	Centers for Disease Control and Prevention
CDFU	Communications for Development Foundation Uganda
COP	Chief of Party
COTR	Contracting Officer's Technical Representative
DDHS	District Director of Health Services
DDT	Dichloro-Diphenyl-Trichloroethane
DEO	District Environment Officer
DHE	District Health Educator
DHI	District Health Inspector
DHO	District Health Officer
DHT	District Health Team
FAQ	Frequently Asked Questions
GIS	Geographic Information System
GoU	Government of Uganda
GPS	Global Positioning System
HHS	U.S. Department of Health and Human Services
IEC	Information, Education and Communication
IEE	Initial Environmental Examination
IR	Intermediate Result
IRS	Indoor Residual Spraying
LC	Local Council
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MOP	Malaria Operational Plan
MOU	Memoranda of Understanding
NEMA	National Environment Management Authority
NMCP	National Malaria Control Program
PMI	President's Malaria Initiative
PMP	Performance Management Plan
PPE	Personal Protective Equipment
PSC	Pyrethrum Spray Collections
SEA	Supplementary Environmental Assessment
STTA	Short Term Technical Assistance
TA	Technical Assistance
TOT	Training of Trainers
USAID	U.S. Agency for International Development
WHO	World Health Organization
VCD	Vector Control Division

Executive Summary

This report presents the Uganda Indoor Residual Spraying (IRS) Project's progress in quarter 3 starting April 1st to June 30th 2010. The report outlines the key project activities and achievements in the quarter, the challenges and constraints faced, lessons learned, and recommendations for future implementation.

Background

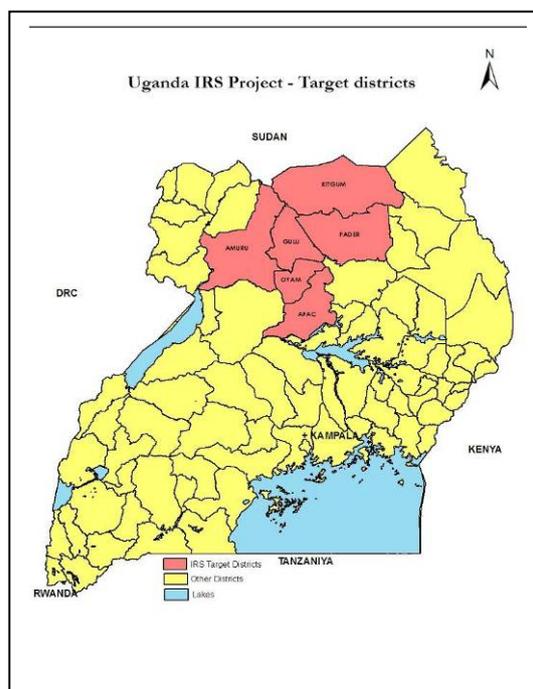
The purpose of the Uganda IRS Project is to achieve the President's Malaria Initiative (PMI) Uganda targets in indoor residual spraying. In particular, the Uganda IRS Project contributes to IR.8.1: Effective use of social sector services through three main objectives:

- Implementation of a high quality IRS program
- Conducting comprehensive monitoring and evaluation of the IRS program
- Developing the national capacity to conduct IRS.

The goal of PMI is to reduce malaria-related mortality by 50% by the end of 2010 in the following vulnerable groups: children under five and pregnant women. PMI/Uganda has a five-year strategic plan and an annual Malaria Operational Plan (MOP) for Uganda which guides current implementation and scale-up of activities. IRS is the largest component of the MOP and is the cornerstone of the PMI/Uganda program.

The Uganda IRS program activities are being carried out with full collaboration of the Uganda National Malaria Control Program (NMCP) and cover six priority districts: Apac, Amuru, Gulu, Oyam, Pader and Kitgum.

Abt Associates, Inc. (Abt) as prime contractor of this program, manages and directs all technical component activities in support of IRS planning, procurement, implementation, monitoring, and capacity building. In addition to Abt, the project is also supported by Communications for Development Foundation Uganda (CDFU), a subcontractor which provides expertise and support for Information, Education and Communication (IEC) and Behavior Change Communication (BCC) activities in support of IRS program campaigns and population sensitization under the direction of Abt technical staff.



Project Activities/Achievements

The project activities in this quarter focused on the four districts of Amuru, Gulu, Kitgum and Pader. The activities in Kitgum and Pader in this quarter focused on preparation for the commencement of the 5th spray round.

Spraying in Amuru district was welcomed with such eagerness that spraying began earlier than expected with Purongo sub-county starting on March 15th 2010. By March 22nd, 2010, most sub-counties in Amuru had commenced spraying and all activities were concluded by May 8th, 2010.

In Gulu, spraying commenced on April 5th, 2010 and was concluded by May 14th, 2010. Due to a shortfall of insecticide, seven parishes (Mede, Labworomor, Owalo, Paibona, Binya, Palaro, and Lamola) in three sub-counties of Odek, Awach and Paloro in Gulu district were not completed by May 14th 2010. Of these seven parishes, the parishes of Mede, Binya, Palaro and Lamola were partly sprayed while Labworomor, Owalo and Paibona were not sprayed at all. These seven parishes were completed using the second round of procured insecticide commencing June 7th 2010. However, the spraying of the seven parishes was put on hold by 12th June 2010 pending the receipt of formal communication from NEMA authorizing the use of carbamates. This authorization was provided by NEMA and spray activities resumed on June 21st 2010. All seven remaining parishes were concluded by July 6th 2010.

Spraying commenced in Kitgum and Pader districts on June 11th, 2010. Kitgum district has been divided into two districts, resulting in the new district of Lamwo; however this spray round is operating within the former boundaries of Kitgum, treating it all as one district. Spraying in Kitgum and Pader is currently ongoing and expected to conclude by the end of July.

Planning Activities

Prior to the micro-planning meetings in Kitgum and Pader districts, Abt staff had a planning meeting with Juan Manuel Urrutia, a visiting consultant who provided Short Term Technical Assistance (STTA) that resulted in a detailed plan for enhanced logistical, stock control, performance monitoring and supervisory operations in the two districts. The plan identified the locations of stores at the Parish level, the target number of households for each store, and the required number of spray personnel determined. This information was used to detail out the required insecticide, other supplies and equipment and the set times for dispatch.

Activities by Intermediate Result

1.1. Result 1: High-Quality IRS Program Implemented

Strategy: Planning, management and implementation of indoor residual spraying in collaboration with key stakeholders.

Table 1: Result 1 Indicators

Indicator	FY 10 Target	Quarter 1 Actual	Quarter 2 Actual	Quarter 3 Actual
Number of district level planning and introductory meetings conducted	24	4	8	4
Number trained in IRS*	5,500	2,298	2,989	1,928
Number of IRS print materials disseminated	15,000	1,450	19,209	15,000
Number of community meetings held	94	40	47	6

Number of radio spots aired	3,200	500	690	600
Number of radio talk shows conducted	120	27	23	10
Number of community members sensitized on IRS	3,290	1,244	1,745	495
Number of districts sprayed	6	2	2	2
Number of households sprayed with IRS	1,546,618	330,663	262,164	240,715

**Number trained includes clinicians and spray personnel i.e. spray operators, team leaders, supervisors, store keepers and wash persons. The training done includes refresher and new comers training (new comers are less than 5%).*

Accomplishments this quarter:

Procurement and Logistics

Carbamates insecticides were used for IRS in Kitgum and Pader during the fifth spray round. A total of 160,000 sachets (500 drums) of WP 80% Bendiocarb insecticide were procured. Most of the required Personal Protective Equipment (PPE) were in stock and were distributed to the two districts; items newly procured included socks, masks and face towels. The items listed in Table 2 were distributed to Kitgum and Pader for use during the spray round. The same insecticide will be used in the subsequent spray rounds in Oyam, Apac, Gulu and Amuru districts.

Table 2: Items Distributed to Kitgum and Pader

Item	Kitgum	Pader	Total
Gumboots	911	948	1,859
Helmets	827	835	1,662
Overalls	1,822	1,896	3,718
Rubber Gloves (Short)	827	861	1,688
Rubber Gloves (Long for wash persons)	84	87	171
Socks (pairs)	1,822	1,896	3,718
Masks (pieces)	28,945	25,050	53,995
Face Towels (pieces)	753	781	1,534

IEC/BCC

The IEC/BCC activities were carried out by project partner CDFU. In Kitgum and Pader, IRS committees were formed to spearhead community mobilization and sensitization on IRS and to assist in monitoring of spray activities at the community level. The IRS committees comprise of 11 members from local leaders including LC III chairman, Secretary of Health, sub-county chief, women representatives, youth representatives, religious leaders and centre head teachers. IRS committees were formed in each sub-county in the two districts resulting in a total of 47 committees. The committees' duty is to mobilize and sensitize community members at all levels down to the Parish level on IRS through community meetings and the dissemination of IRS print materials. The committees had a one-day orientation workshop during which they developed a five-day work plan detailing how they would reach and disseminate IRS IEC/BCC communications to sub-county populations. The table below provides details of the IEC/BCC activities conducted during the quarter.

Table 3: IEC Activities

District	Sub-county Leaders Sensitization meetings		Radio spots	Radio talk shows	IEC materials distribution	
	No. of Meetings	Participants			Community Leaflets	Leaders Factsheets
Kitgum	2	209	300	5	5,500	2,000
Pader	4	286	300	5	5,500	2,000
Total	6	495	600	10	11,000	4,000

World Malaria Day

The Uganda IRS project was represented by the sub-contractor CDFU at the World Malaria Day celebrations which took place on the April 25th, 2010 in Mpigi district at the Main Celebration Centre. A newspaper supplement about IRS was printed in the New Vision newspaper, along with an exhibition during the commemoration day. The IRS exhibition display, which included photographs and equipment, garnered a lot of interest from the participants. This event provided an opportunity to further educate and inform the population on the IRS program. The exhibition was visited by the Director of Operations the Global Fund Geneva and the Deputy Coordinator -PMI Dr Bernard L.Nahlen who was accompanied by Mr. John Mark Winfield, Deputy Director USAID, M/s Megan Gerson Rhodes, Health Team Leader and team of the Uganda USAID office, as shown in the photograph below:



Spraying Operations

Introductory Meetings

On April 27th, 2010 and April 28th, 2010, respectively, introductory meetings were held in Kitgum and Pader with the district leaders. The district leaders welcomed the proposal of rolling out spraying using bicycles to transport spray operators at the parish level. A total of 16 district leaders participated in the meetings in the two districts.

Introductory Meetings	
District	No. of Participants
Kitgum	9
Pader	7
Total	16

Micro-planning

Preparatory meetings were held at Abt’s Kampala office, with the technical assistance and participation of consultant Juan Manuel Urrutia, before the micro-planning meetings. The preparatory meetings resulted in enhanced program approach to the management of logistical, stock

control, performance monitoring and supervisory operations, which were used in the micro-planning meetings in Kitgum and Pader. The micro planning meeting in Kitgum was held on May 24th, 2010 while Pader’s meeting was held on May 26th, 2010. The objective of the meetings was to develop a work plan which detailed action and implementation plans per Parish and Village, for IRS activities in the two districts. During these meetings, the following issues were discussed/introduced to participants: a) the new performance monitoring plan of the IRS exercise, which monitors at the Parish level and Team Leader level, b) the new Carbamates insecticide WP 80% Bendiocard, c) the use of bicycles as a means of transporting spray operators in the whole district, and d) the approach of using VCOs to train the spray personnel. The team leaders were given the responsibility to follow-up on the implementation of the work plan. The meetings were facilitated by Abt staff with participants including IRS supervisors, DHT members and MOH VCO from various districts.

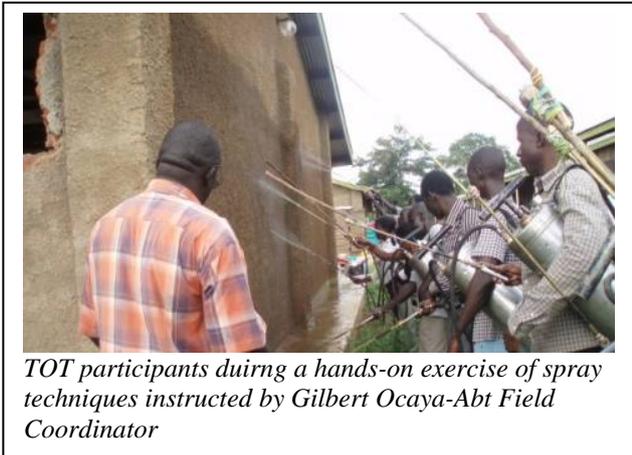
Training of Trainers (TOT)

The two day TOT workshop was held in Kitgum, at Acet Hall on May 25th and 26th, 2010, and in Pader, at Council Hall on May 27th and 28th, 2010. The TOT participants were the same participants from the micro-planning activity. The sessions were facilitated by staff from Abt, CDFU and the MOH. The presentations included a detailed introduction to the safe use and management of the new Carbamate WP 80% Bendiocard insecticide conducted by two consultants from Bayer Environmental Science (supplier of the insecticide). Vector Control Officers (VCOs) from various districts participated in the TOT in order to further develop the pool of skilled trainers available to conduct the spray personnel training, and to build the capacity of VCOs at the national level. Participants from the districts included IRS supervisors and DHT members. The training built the capacity of the districts by equipping key stakeholders with skills to efficiently carry out the IRS program. During the TOT, participants were taught basic skills associated with IRS, including basic spraying techniques, team management, environmental compliance and safety, data collection and management.

Table 4: Training of Trainers

District	Category	Male	Female	Total
Kitgum	Supervisors	11	11	22
	DHT	14	0	14
	MOH/VCO	25	9	34
Total		50	20	70
Pader	Supervisors	26	1	27
	DHT	10	3	13
	MOH/VCO	9	1	10
Total		45	5	50
Grand Total		95	25	120

Representatives from Bayer Environmental Science provided manuals, including IRS training manuals for the supervisors/trainers and manuals for the spray men, which were distributed to the participants for use when training the spray personnel. In addition, a training manual for data management was developed by the Abt team and also distributed to the participants. The training also included hands-on experience in spray techniques as demonstrated in the photos below.



Award of best Performers

During the TOT, the best performers from the previous spray round were recognized and poor performers were penalized. This activity was carried out by the Abt Chief of Party (COP) who shared previous IRS experience and presented the performance in the previous spray round. The COP emphasized performance-based monitoring of the IRS program and encouraged the team to do better in the upcoming spray round. A total of seven supervisors in Kitgum and Pader districts were recognized for their good performance and were awarded with a small token of recognition, while five supervisors were discontinued from future involvement in the IRS program as a result of their poor performance in the previous round.



Best performers receiving awards from the COP in Kitgum District during the TOT

Recruitment and Training for Spray Teams

Spray personnel were selected on the basis of their current participation in health activities or involvement in other community activities. Emphasis was put on selection of spray personnel who were representatives in their communities. Members of Village Health Teams (VHTs) were targeted as their status within the community assists in community-level acceptance of IRS and facilitates successful implementation of the program. Literacy and numeracy were key prerequisites for recruitment. Spray personnel include supervisors, team leaders, spray operators, wash persons, and storekeepers.

The three-day training of spray personnel on IRS-related topics in Kitgum and Pader districts was conducted by the VCOs, IRS supervisors and the DHT members who participated in the TOT. The involvement of VCOs ensured the presence of skilled trainers and proved to be effective and efficient in achieving quality training of the spray personnel. The distributed manuals helped to ensure uniformity in training of the spray personnel. Spray operators were taught basic skills associated with IRS, including basic spraying techniques, team management, environmental compliance and safety, and data management. The table below summarizes the number of participants trained per district:

Table 5: Spray Personnel Training

District	No. of Participants	Male	Female
Kitgum	909	734	175
Pader	984	818	166
Total	1,893	1,552	341

Storekeepers Training

Training of store keepers took place on June 10th, 2010 for Kitgum/Lamwo in Acholi Private Sector Foundation Hall in the town of Kitgum. The sub-counties of Madi Opei, Padibe West, Lokung, and Palabek Kal in Lamwo did not turn up at the training as they wanted the training to take place in the newly formed district. The second training, in the new district, took place on June 11th, 2010. Pader conducted its training on June 11th, 2010 at Pader council hall. The storekeepers' training included practical sessions in daily distribution forms, report for losses form, insecticide track log, and data release forms. In addition, a session on environmental compliance was conducted. The table below summarizes the total number of storekeepers trained per district:

Table 6: Store keepers training

District	No. of Participants	Male	Female
Pader	63	49	14
Kitgum	59	51	8
Total	122	100	22

Clinician Training on insecticide poisoning management

A total of 35 clinical officers from health centers III and IV and hospitals in Kitgum and Pader districts were trained on the new Carbamates insecticide to be used in the spray round. The training conducted by MOH staff raised the awareness of the health workers on the toxicity of the Carbamates insecticide and poison management procedures in case of chemical poisoning.

Launch of Spraying

Spraying in Amuru took an average of 34 days involving 435 spray operators. The insecticide usage rate in Amuru was an average of 1.89 houses per sachet. The average number of houses sprayed per spray operator per day was 7.3 houses. In Gulu, spraying took an average of 29 days involving a total of 609 spray operators. The insecticide usage rate in Gulu was an average of 1.90 houses per sachet. The average number of houses sprayed per spray operator per day was 7.5 houses.

A total of 244,193 households¹ were found in Amuru and Gulu of which 240,715 households were sprayed (98.7% coverage). The total population found was 818,308, of which 808,596 (98.9%) were protected through IRS.

Table 7: Summary of IRS Output Indicators for Amuru and Gulu

Indicator	Amuru	Gulu	Total
No of districts sprayed	1	1	2
Total households	107,894	136,299	244,193
Households fully sprayed	106,483	130,817	237,300
Households partly sprayed	1,236	2,179	3,415
Total households fully and partly sprayed	107,719	132,996	240,715
Households not sprayed	175	3,303	3,478
% of households partly or fully sprayed	99.8%	97.6%	98.6%
% of households not sprayed at all	0.16%	2.42%	1.42%
Total population	360,301	458,007	818,308
Total population protected	359,874	448,722	808,596

¹ Households means houses (individual structures) in the Ugandan context

Total population not protected	427	9,285	9,712
% of population protected	99.9%	97.9%	98.8%
% of population not protected	0.12%	2.03%	1.19%
No. of children under five protected	80,988	85,972	166,960
No. of pregnant women protected	13,502	14,608	28,110
No. of insecticide sachets used	57,402	67,175	124,577
Average number of households sprayed per sachet	1.89	1.90	1.9
Average number of households sprayed per spray operator	7.3	7.5	7.4
No. of mosquito nets found	38,244	91,550	129,794
No. of children under 5 sleeping under a net	32,573	43,086	75,659

1.2. Result 2: Comprehensive Monitoring and Evaluation of the IRS Program Performed

Strategy: Ensure appropriate program activity monitoring, environmental monitoring and compliance, and vector surveillance.

Table 8: Result 2 Indicators

Indicator	FY 10 Target	Quarter 1 Actual	Quarter 2 Actual	Quarter 3 Actual
Annual work plan developed and approved	1	1	0	0
IRS progress reports prepared and submitted	17	4	4	4
Number of district level digital maps prepared	12	6	8	8
Number of inspections done by supervisors per spray round	1,000	0	235	378
IEEs and/or SEAs completed as required	1	0	1	0
Percentage of washing bays and soak pits inspected	90%	96%	95.9%	73.5%
Number of entomological surveys conducted	16	4	6	4
Number of susceptibility tests conducted	6	0	4	2
Number of wall bioassay tests conducted	210	0	0	0
Number of PSCs carried out	1,080	120	180	216

Accomplishments this quarter:

Environmental Assessment and Compliance

The preparation of the fifth round of IRS in Kitgum and Pader was carried out successfully. Soak pit construction and verification activities were carried out hand in hand with stores repair and verification. A total of 121 soak pits and stores were assessed and verified, of which 59 were for Kitgum and 62 for Pader.

Incineration of IRS waste

The first consignment of the IRS waste (2,000 Kgs) has been incinerated in the Gulu Referral Hospital in the presence of the District Health Inspector (DHI) and the District Environment Officer (DEO). The incinerated IRS waste was composed primarily of nose and mouth masks and empty Alpha cypemethrin insecticide sachets.

Environmental Compliance Inspections

To ensure that environmental compliance is maintained, general support supervision on environmental compliance issues was conducted in collaboration with district environmental officers. PPEs are being cleaned and correctly used by all the IRS teams. In Pader and Kitgum, 89 soak pits out of 121 (73.5%) have been inspected so far.

Entomological Monitoring

Insecticide susceptibility tests for Alpha cypermethrin, Bendiocarb and DDT were carried out in Kitgum and Pader districts. This was done by two teams from the Vector Control Division of the MOH and respective district vector control officers. Post IRS entomological monitoring tests (PSC) were done in both Gulu and Amuru districts by MOH officials with the assistance of district vector officers. In addition another post IRS entomological assessment was carried out in Oyam district.

Pre-IRS Pyrethrum Spray Collections (PSC) (Summary of Results) March 2010

Table 9: Amuru District (12 houses in each sub county)

Sub county	An. gambiae		An. funestus		Culex		Other	
	M	F	M	F	M	F	M	F
Pabbo	22	50	00	04	02	05	00	00
Awak	245	171	58	147	33	40	00	00
Amuru	11	44	05	27	33	40	00	00

Table 10: Gulu District (12 houses in each sub county)

Sub county	An. gambiae		An. funestus		Culex		Other	
	M	F	M	F	M	F	M	F
Patiko	02	35	01	01	00	00	00	01
Paicho	132	212	07	18	00	00	00	01
Bobi	11	39	00	11	00	00	00	01

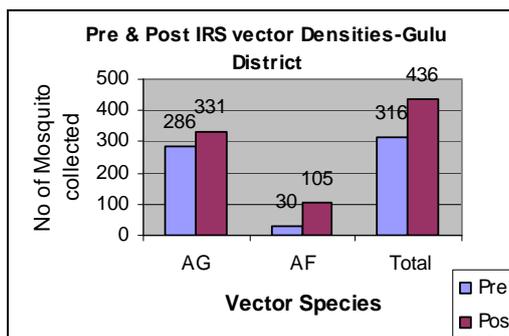
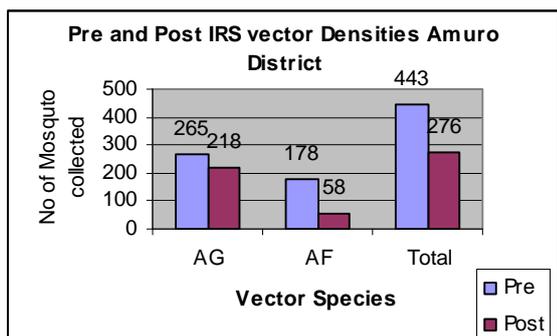
Post-IRS Pyrethrum Spray Collections (PSC) (Summary of Results) May 2010

Table 11: Amuru District (12 houses in each sub county)

Sub county	An. gambiae		An. funestus		Culex		Other	
	M	F	M	F	M	F	M	F
Pabbo	27	114	00	16	04	17	00	00
Awak	24	67	08	33	07	12	00	00
Amuru	06	37	00	09	14	122	00	00

Table 12: Gulu District (12 houses in each sub county)

Sub county	An. gambiae		An. funestus		Culex		Other	
	M	F	M	F	M	F	M	F
Patiko	01	14	00	00	00	00	00	00
Paicho	29	125	02	02	01	00	00	00
Bobi	61	192	03	103	00	00	00	01



It was observed that in Bobi Sub County in Gulu district both *An. gambiae* and *An. funestus* populations had gone up in the houses where PSC were carried out. It was also found that 4 out of 12 houses where PSC were done in this sub county had high vector populations. Primarily it may be due to the quality of the insecticide or spraying or both. Similar trend was also observed in Pachio Sub County in Amuru district where there were few houses with high *An. gambiae* populations. It was similarly observed during the Apac and Oyam spray cycle. Appearance of *An. gambiae* in areas where *A. funestus* populations are down can be seen in Gulu district also. We have now decided to carry out wall bio assays using wild caught vector mosquitoes to check the quality and residual effect of IRS in these districts from next cycle. Intermittent rains in these districts during the study period could have also contributed towards the high vector populations.

Pre-IRS Pyrethrum Spray Collections (PSC) (Summary of Results) - May 2010

Table 13: Pader District (12 houses in each sub county)

Sub county	An. gambiae		An. funestus		Culex		Other	
	M	F	M	F	M	F	M	F
Patongo	00	02	00	07	316	262	00	208
Parabongo	04	13	00	06	08	08	00	00
Atanga	00	06	00	00	06	66	00	00

Table 14: Kitgum District (12 houses in each sub county)

Sub county	An. gambiae		An. funestus		Culex		Other	
	M	F	M	F	M	F	M	F
Namakora	10	185	0	1	27	24	0	0
Kitgum TC	5	42	0	1	107	228	0	0
Palabek Kal	10	8	0	2	13	41	0	0

Pre IRS PSCs were also carried out in Kitgum and Pader districts in this quarter making a total of 216 PSCs carried out in the reporting period. Post IRS in Kitgum and Pader will be done after the spray round.

Monitoring and Evaluation

The project’s data management system has been reviewed and modified to increase the efficiency and timeliness of data reporting for improved performance monitoring and decision making. A new database was developed using Epi Info software, through which the project performance can be tracked including such detail as the individual performance of team leaders and spray operators. The new database also tracks the rate of the insecticide usage and houses sprayed per team on a daily basis. The database is secure and has automatic daily data backups. Validation rules were inbuilt in the database which helps in quick identification and minimizing of errors. A data collection system was introduced to improve the timeliness of data collection and transmission from the field to the data entry point, improving the pace at which the project could identify and address individual or spray team issues. Data collectors using motorbikes transport the data cards from the Parish stores to the data entry point on a daily basis. In Kitgum and Pader districts, four data collectors per district were employed to ensure all data cards are collected from the field on a daily basis. Three data clerks were employed per district to enter data from the data cards into the database on a daily basis to curb data backlogs. Daily performance reports showing key performance indicators are issued from the database to the program team to aid in performance monitoring and decision making.

Surveillance Data

Collection of data for impact assessments started in June, 2010 when the M&E manager visited selected health facilities in Kitgum and Pader districts. A total of nine health facilities were randomly selected for impact assessment in the two districts with a focus on HC III and IV and hospitals. Data on selected indicators back dated to 2006 is being collected from these health facilities. A preliminary impact assessment report will be prepared as soon as the data analysis is completed.

1.3. Result 3: National Capacity for Conducting IRS Developed

Strategy: Improve the technical skills and capability of NMCP/MOH (national and district level) and other relevant government bodies including National Environment Management Authority (NEMA).

Table 15: Result 3 Indicators

Indicator	FY 10 Target	Quarter 1 Actual	Quarter 2 Actual	Quarter 3 Actual
IRS training module developed	0	0	0	0
Number of IRS and entomological monitoring plans developed and implemented	2	1	0	0
Number of national and district staff conducting the in-service training	0	0	0	0
Number of students trained in IRS	0	0	0	0

Accomplishments this Quarter

Most of the activities under result 3 are scheduled for the second year of the project cycle. However, some progress has been made on establishment of the insectary as detailed below.

Establishment of Insectary

The establishment of the insectary in Gulu University premises was discussed with USAID, the MOH and Gulu University. During this meeting, it was decided that a Memorandum of

Understanding (MOU) should be prepared between the Uganda IRS Project and Gulu University whereby the university will provide the necessary space and plan for the building. The draft MOU and building plan is expected to be completed by end of July, 2010.

Project Management and Administration

Accomplishments this quarter:

Human resources

The two additional IRS Field Coordinators started work after completion of a successful orientation. The project Accountant, Hellen Karuhanga tendered her resignation effective July 9th, 2010. A new driver based in the Gulu office was recruited and began work on June 14th, 2010.

As the recruitment process for the logistics manager position is underway, a logistics consultant, Edwin Kalyango, was hired to execute the logistics tasks for an interim period starting June 19th, 2010.

Short Term Technical Assistance (STTA)

During this quarter, consultant Juan Manual Urrutia provided STTA to the project in the area of logistics management. A copy of his trip report and findings has been provided to USAID/Uganda, and his recommendations are currently being put into practice by the project.

Procurement of goods and services

A total of 700 pumps and associated spare parts were ordered with delivery expected in August. The project has also acquired a fifth vehicle to support the extensive field visits required for project operations.

IT/Maintenance of Offices

A server was installed in the Gulu office. All the computers in Gulu office were connected to a local area network and the Internet.

In the Kampala office, the city power cable which was imbedded in the ground was found to be faulty and was replaced with an aerial cable. In addition, a new grounding system was installed for the building to guard against potential electrical problems.

Disciplinary Measures

- The storekeeper for Laroo sub-county in Gulu district was arrested on April 29th, 2010 for failing to account for nine cartons of insecticide. He was held at the Central Police Station in Gulu, awaiting appearance in court.
- Supervisors who performed poorly in the previous spray round in Kitgum and Pader districts were discontinued from any involvement in current and future IRS activities.

Reporting Requirements

The Uganda IRS Project developed and submitted the following program documentation as contractually obligated:

1. Monthly Reports-April through June
2. End of Spraying Report-Amuru/Gulu
3. Project Quarter 2 Report (Jan-Mar, 2010)

Successful interventions/ Innovative Approaches

1. There has been a great improvement in the insecticide usage in the ongoing spray round in Kitgum and Pader district. Preliminary data indicates that on average 2.8 to 3.0 houses are sprayed per sachet, up from an average of 1.9 houses per sachet in the previous round. The houses covered per spray operator per day has also improved greatly with many spray operators spraying an average of 10 or more houses per day.
2. The IRS field coordinators were allocated districts/sub-counties to supervise per spray round. This has improved on the supervision of the spray activities due to the close monitoring at sub-county level.
3. The community is vigilant in observing that a sachet is dropped into the spray pump when the spray operator requests water. By encouraging this community level monitoring, the project was able to identify some spray operators who intended to steal the insecticide.
4. The districts provided IRS storage facility free of charge at the Parish and Sub County level.
5. An IRS data management training manual was developed to ensure synchronization of knowledge passed on from the trainers to the trainees. This manual and the manuals from Bayer Environmental Science were given as handouts to all participants in the TOT in Kitgum and Pader districts. There has been a great improvement in the understanding of IRS concepts by the spray personnel, which is partly attributed to the manuals used during training.
6. VCOs were trained in the TOT and were deployed to train the spray operators in the districts of Kitgum and Pader. This has brought about a great improvement in the quality of the training given to the spray operators, and has contributed to positive preliminary results where spray operators are spraying an average of 3-4 houses per insecticide sachet.
7. The introduction of motorcycle use to collect the spray cards at respective stores and the hiring of additional data entry clerks has significantly reduced the backlog of data and is helping to ensure timely reporting to project field coordinators for prompt action.
8. Involving the entire spray team in the construction of local soak pits is found to be motivating, promotes ownership, and speeds up the construction process as compared to contracting a team leader alone.
9. The scale-up of bicycles as a mode of transport to access houses is cost effective and more efficient as the spray team is never rushed to return to the store and bicycles can better access households located in areas with poor road networks.
10. In Amuru district, the sub-county leadership in Purongo sub-county were so pleased with the successful completion of the spray round that they organized a party inviting project staff to celebrate successful implementation.
11. Payment of spray personnel continues to be successfully carried out using the Post Bank mobile banking system.

Challenges/Constraints

1. In some urban centers like Gulu, low acceptance of IRS was observed as some people go to work and leave their houses locked during the day, restricting access by spray operators.

2. Lack of supervision by some team leaders and supervisors derails performance.
3. Poor road networks and dispersion of houses makes some villages and homesteads inaccessible. These hard to reach places need special arrangement for transportation of spray operators.
4. Local leaders in Gulu district were unable to provide a central store to house IRS logistics which has congested the project central store as it has to serve Gulu district as well.
5. Identifying suitable storage locations at parish level is difficult in some remote parishes.
6. The project encounters occasional conflicts of interest where a local leader wants their relatives, friends and in-laws to be recruited in the spray team.
7. Indiscipline has been identified among some individual spray operators, resulting in low volumes of houses being sprayed. With the project's new monitoring system, these issues are quickly identified and unproductive spray operators are quickly removed from service.
8. Competing demands exists between health programs and agencies at the community level for the participation of the same human resources, particularly Village Health Team members (Team Leaders) or Health Assistants (Supervisors).

Lessons Learned and Recommendations

- Poor performers should be discontinued from work and the high performers should be recognized and rewarded.
- Involvement of VCOs in the training of spray operators has not only built capacity at national level, but has also enhanced the quality of the spray operators' training.
- All cadres of politicians, religious leaders, civil society and elders should be involved in mobilizing the community for forth coming IRS implementation.
- Spray operators are capable of working hard if motivated to do so. In the current spray round in Kitgum and Pader, each spray operator was given a target of spraying 10 houses per day. They were encouraged to spray as many houses as possible with assurances that they will be compensated for the value of 25 days work, even if they complete spraying in less time. This has removed the incentive to lengthen the time of spraying, and motivated the spray operators, who are now spraying an average of 12 houses per day.

Planned Activities for the Quarter Four

1. Conclusion of spraying of Kitgum and Pader districts
2. Spraying of Apac and Oyam districts which includes:
 - Micro-planning with the district health office
 - Procurement of required supplies
 - Training of health officers in handling of insecticides
 - Training of Trainers (TOT)
 - Entomological studies
 - Environmental compliance inspection
 - Logistical supplies to the sub-counties/parishes
 - Training of spray operators
 - Actual spraying