



Supervisory Toolkit for Better Indoor Residual Spraying

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February 2013

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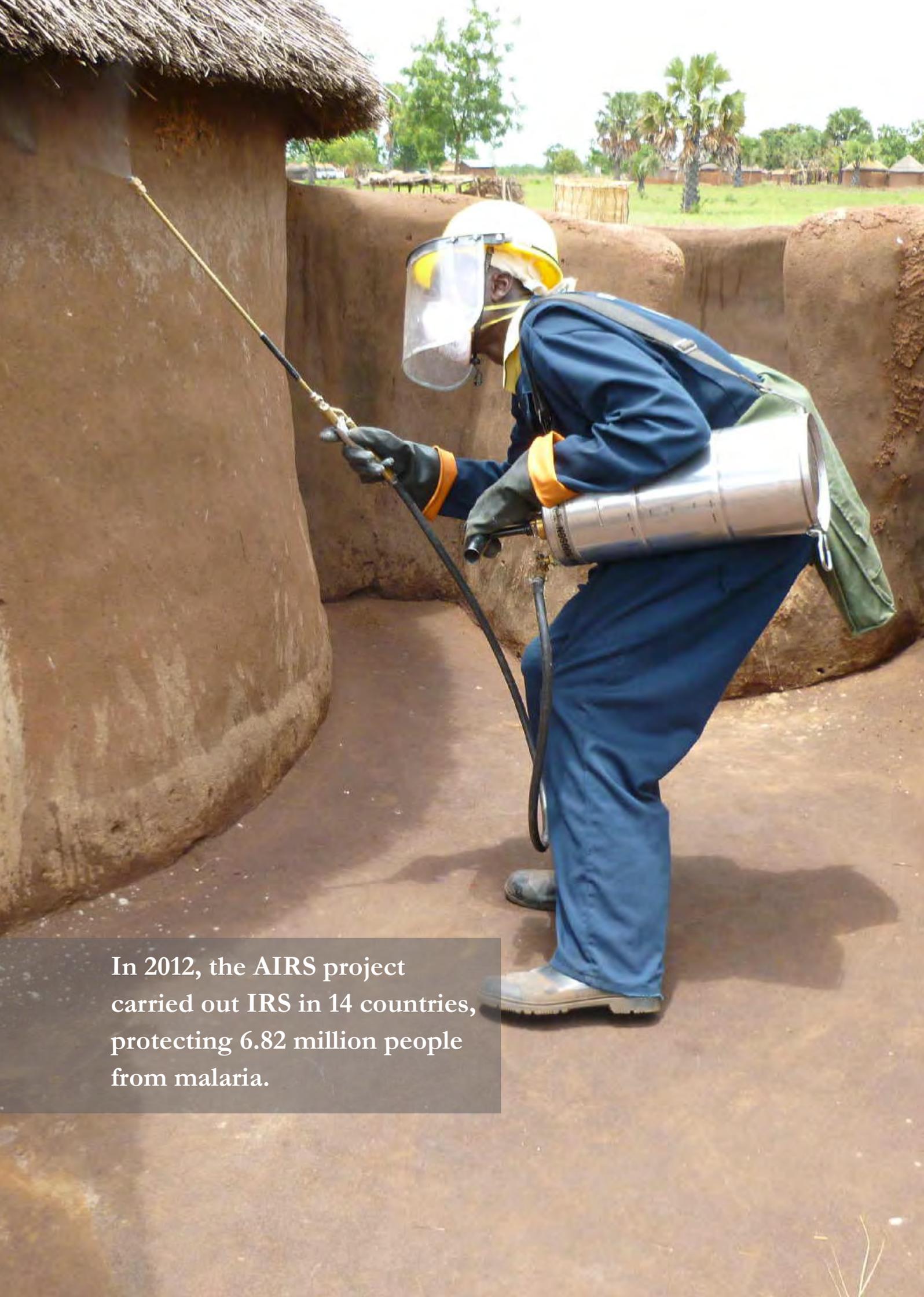


Supervisory Toolkit for Better Indoor Residual Spraying

February 2013

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



In 2012, the AIRS project carried out IRS in 14 countries, protecting 6.82 million people from malaria.



Contents

Introduction	v
Operations	i
Race to the Starting Line	2
Spray Operations Supervision Checklist	4
Spray Performance Tracker	10
Environmental Compliance	19
Pre-Season Environmental Compliance Assessment	20
Monitoring and Evaluation	27
M&E Error Eliminator	28





Spray operators wear protective clothing in preparation for the IRS campaign in Ethiopia.



Introduction

Each of us has the power to save lives. Indoor residual spraying (IRS), the application of insecticide to homes, kills malaria-transmitting mosquitoes and protects millions of people from malaria. In 2012 alone, the Africa Indoor Residual Spraying project (AIRS), a program led by Abt Associates and funded by the United States Agency for International Development through the President's Malaria Initiative, protected 6.82 million people in Africa from malaria including 182,524 pregnant women and 1.22 million children under five.

While IRS has a proven impact on malaria transmission, managing an IRS campaign is complex and demanding. We developed this toolkit to help IRS program managers with the critical task of supervision. Program managers can use the *Supervisory Toolkit for Better IRS* to prepare for and monitor IRS campaigns in their countries.

These tools are not meant to be a how-to guide or comprehensive textbook on IRS—several other guides exist to serve those needs such as the *Roll Back Malaria IRS Toolkit* and *President's Malaria Initiative Best Management Practices Manual*. These are supervisory tools. Some tools facilitate IRS planning before the spray campaign, such as the Race to the Starting Line and Pre-Season Environmental Compliance Assessment; others should be used to monitor activities during the IRS campaign. We believe that project managers must visit operational sites and communities where spraying takes place to properly supervise IRS teams. Each operational site should receive a visit from a senior manager at least once per week during spraying. While visiting operational sites, managers can use the Supervisory Toolkit to monitor quickly and easily the quality of work, to identify potential problems—such as insecticide stock out—and to take corrective action.



The toolkit focuses on three technical areas of IRS that we believe are essential for successful IRS campaigns and that every program manager should have some basic knowledge of: operations, environmental compliance, and monitoring and evaluation. Through carefully organized spray operations, program managers can spray right before peak malaria transmission season, maximizing the impact of IRS. By implementing best practices in environmental compliance, program managers ensure IRS does not harm the environment, beneficiaries of IRS, or other people living and working near operational sites. Lastly, monitoring and evaluation provides program managers with critical data to track the progress of IRS and to use the results for decision-making.

Finally, we recognize that IRS is not a one-size-fits-all intervention. AIRS has carried out IRS in 14 African countries, and our IRS campaigns are influenced by geography, capacity, funding, malaria transmission season, and countless other factors. We encourage program managers to expand, modify, and adapt tools to meet the needs of their country program.

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Manager

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Specialist

Operations

Race to the Starting Line
Spray Operations Supervision Checklist
Spray Performance Tracker





Race to the Starting Line

PURPOSE

The purpose of the tool is to enable project managers assess the progress of preparations to launch spray campaigns.

WHO SHOULD USE THIS TOOL?

IRS managers and operations staff including Chiefs of Party, Country Operations Managers, other senior managers working in country, Technical Coordinators, headquarters staff and senior managers.

WHEN SHOULD IT BE COMPLETED?

Race to the Starting Line should be completed by the Chief of Party two months before the IRS campaign and updated weekly.

HOW DO YOU USE THE TOOL?

Each activity listed in the left column needs to be completed in preparation for the IRS campaign. Based on the start date of the IRS campaign, a project manager can assign a Due Date (using the Due Date row) and Person Responsible (see far right column) for the activity. The Race to the Starting Line can be printed on a large poster and displayed in country offices in order to remind staff of upcoming deadlines and hold them accountable.

HOW TO USE RESULTS

Results can be used to determine remedial action to take to ensure spray campaigns are launched on time and according to plan. They can also be used to communicate the progress of pre-spray preparatory activities.



Spray Operations Supervision Checklist

PURPOSE

To provide criteria for monitoring the implementation of spray operations activities in the field.

WHO SHOULD USE THIS TOOL?

All supervisors and support-supervisors of field spray operations. These include project staff, Ministry of Health officials, District Officials and Sub-district Supervisors.

WHEN SHOULD IT BE COMPLETED?

The Checklist should be completed each time the manager visits the operational site.

HOW DO YOU USE THE TOOL?

Project managers and/or operations managers should visit spray operational sites and communities being sprayed and use the checklist to make sure staff, storage facilities and warehouses are compliant.

HOW TO USE RESULTS

Results can be used to propose remedial action, where necessary, to ensure that spray operations are implemented in line with the project guidelines. Results can also inform project activity reports.



Spray Operations Supervision Checklist

Storage Facility	Yes	No
✓ Is the storage facility situated away from domestic dwellings?		
✓ Is the store adequately secured? <ul style="list-style-type: none"> ▪ Security guard ▪ Hazard signs ▪ Double Locks ▪ Firefighting equipment ▪ Is there adequate water supply? 		
✓ Is the store tidy and well arranged?		
✓ Is the store keeper wearing appropriate PPE?		
✓ Is there a well-stocked first aid kit?		
✓ Is the performance tracking sheet displayed, up to date, and correctly filled out?		
✓ Is there adequate ventilation in the store?		
✓ Are stock cards correctly filled out and up to date?		
✓ Are other store stock records/forms routinely filled out (issue notes, receipt notes, etc.)?		
✓ Is there a functioning thermometer in the store, and are the temperature readings recorded regularly?		
✓ Is there a physical updated ledger book?		

Insecticide Stock Management	Yes	No
✓ Are the insecticides packed on shelves or pallets?		
✓ Are the insecticides correctly stacked?		
✓ Is the insecticide stacked away from direct sunlight?		
✓ Are you able to walk around the insecticide pallets with ease?		
✓ Are the used/empty sachets/bottles counted and stored in a dedicated place?		



Spray Operations Supervision Checklist

Insecticide Stock Management	Yes	No
✓ Is the sum of used sachets/bottles and unused sachets/bottles (including those issued out on the day you make the visit) equal to the total stock received at the store top date?		
✓ Are there any chemical spills visible?		
✓ Are the insecticide tracking sheets up to date?		
✓ Is the insecticide stock balance correct?		
✓ Is the stock rotation ("FIFO") rule observed?		

Soak Pit and Washing Facilities	Yes	No
✓ Is the soak pit correctly constructed? <ul style="list-style-type: none"> ▪ Gradient ▪ Materials ▪ Is the soak pit fenced off from the children, animals, etc.? 		
✓ Are hazard signs prominently displayed?		
✓ Is there adequate water supply?		
✓ Are there sufficient washing facilities/showers for the operators?		
✓ Are the washing facilities for women and men separate?		
✓ Is there adequate soap for washing?		
✓ Are the overalls used each day washed with soap and hung to dry over the soak pit?		

Household Preparation	Yes	No
✓ Are the householders informed and given time to prepare and vacate the house?		
✓ Are the householders instructed on what to do during and after the spraying of their houses?		
✓ Are household items, including water, food, cooking utensils removed from the house?		
✓ Is furniture that cannot be removed moved to the center of the rooms and covered to allow easy access for spraying the walls?		
✓ Have the walls/ceilings been cleared of any moveable items, e.g., posters, pictures, mosquito nets, etc.?		
✓ Are domestic animals and pets kept away from the house?		



Spray Operations Supervision Checklist

Worker Safety	Yes	No
✓ Are all spray operators, team leaders, wash persons, etc., wearing appropriate PPE?		
✓ Is the PPE in good condition?		
✓ Is the PPE fitting and worn correctly?		
Ask if the spray operators are comfortable or if they have any other comments about the protective clothing.		

Mixing Insecticide	Yes	No
✓ Is the water poured up to the 10 liter mark on the spray pump?		
✓ Is the insecticide sachet opened and contents poured/dropped in to the tank with no spillage; empty packaging placed back in the haversack?		
✓ Has the operator done some agitation to dissolve the insecticide?		
✓ Is the pump then pressurized to 55psi and checked for leaks and re-shaken to mix?		
✓ Are spray operators carrying the pumps correctly (pump held under the arm and the gauge in front)?		

Applying Insecticide	Yes	No
✓ Is the spray operator using the correct nozzle tip for the insecticide (8002E)?		
✓ Does the spray operator apply vertical swaths, 80cm wide, with a 5cm overlap, and with the tip of the nozzle 45cm from the wall?		
✓ Are they applying at the right speed of 5 seconds per 2 vertical meters?		
✓ Are spray operators considering immovable obstructions?		
✓ Are they regularly shaking the pumps and checking the pressure gauges to ensure the pressure stays between 55 and 35 psi?		
✓ Is there any run off of insecticides dripping from the walls?		
✓ Does the spray on the wall appear to be uniform or are there streaks, especially on the edges, where insecticide is heavy (indicating worn nozzle tip)?		
✓ Are there any signs of leakage from the any part on the spray pump?		



Spray Operations Supervision Checklist

Spray Operators' Conduct	Yes	No
✓ Are spray operators smoking while spraying?		
✓ Are spray operators eating while spraying?		
✓ Are they carrying any food or cigarettes?		
✓ Are they polite to clients?		
✓ Do they look neat and presentable?		
✓ Are they able to explain instructions to the householders?		
✓ Are they able to respond to the IRS FAQs?		
✓ What do the householders do with the rubbish collected after spraying?		
✓ Do the spray operators carry out mobilization?		
✓ Are structures correctly marked after spraying?		
✓ Are the spray cards accurately filled out?		

Daily Post-Spray Operations	Yes	No
✓ Upon returning from the field, are spray pumps depressurized and left-over insecticide in spray pumps poured into "Barrel #1"?		
✓ Are barrels #2, 4 and 6 containing enough water for triple rinsing?		
✓ Is the "triple rinse" method being used to wash spray pumps?		
✓ Are all unused and empty insecticide sachets/bottles surrendered by the spray operators and recorded by the store keeper?		
✓ Are all overalls handed in to the washpersons for washing?		
✓ Is all PPE and equipment handed in to the storekeeper?		
✓ Are all used dust masks handed in to the storekeeper and kept in a designated area?		
✓ Do all spray operators take a bath before they leave for their homes?		



In Benin, washers attend a training.



Spray operators in Benin celebrate a successful IRS campaign that protected more than 650,000 people from malaria.



Spray Performance Tracker

PURPOSE

To provide IRS project managers and spray operations field supervisors with the information required to track the performance and progress of spray teams on a daily basis throughout the spray campaign.

WHO SHOULD USE THIS TOOL?

All supervisors and support-supervisors of field spray operations. These include project staff, Ministry of Health officials, District Officials, Sub-district Supervisors, Store Keepers and Team Leaders.

WHEN SHOULD IT BE COMPLETED?

The Spray Performance Tracker should be updated every day during the IRS campaign and sent to the Country Operations Manager every week.

HOW DO YOU USE THE TOOL?

Every operating site will have its own tracking sheet. The sheet should be prominently displayed in a secure part of the operating site. Data should be entered daily either by hand or using Excel software. (See How to Use the Spray Performance Tracker on the following page.)

HOW TO USE RESULTS

The daily performance of each team against the two primary spray performance indicators is calculated and can be measured against the set targets. The tool enables supervisors to identify teams that may be performing below expectation. It can also be used to determine whether stock levels of insecticide will be sufficient to complete a spray campaign.



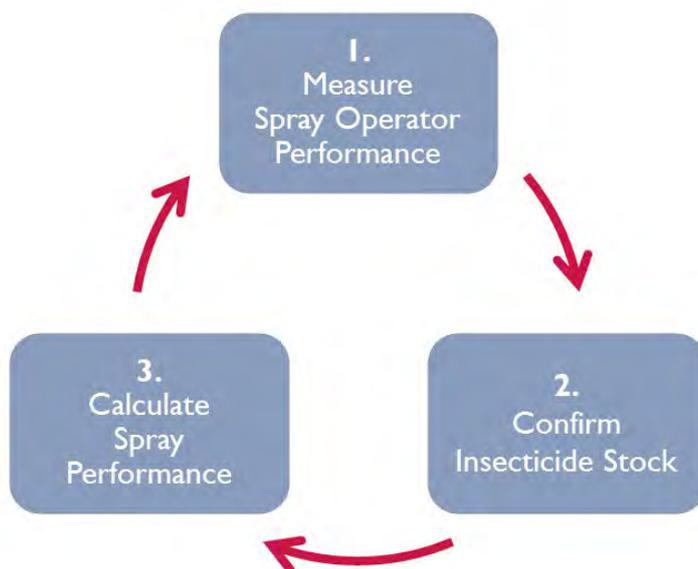
HOW TO USE THE SPRAY PERFORMANCE TRACKER

The Spray Performance Tracker is an easy-to-use Excel-based tool. It provides supervisors with valuable data that they can use to: monitor staff performance, track insecticide usage, and ensure the spray campaign is completed on time. Using the Calculator can help supervisors anticipate and prevent problems such as insecticide stock out.

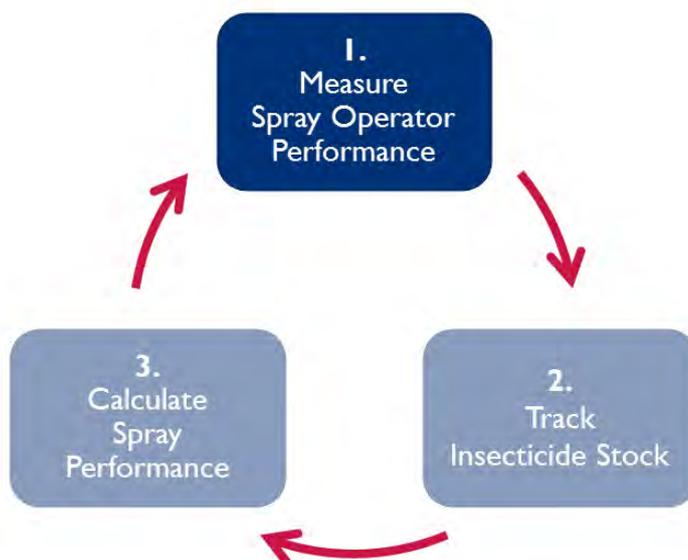
The Tracker measures the average structures sprayed per sachet and the average number of structures sprayed per spray operator per day.

Data should be collected and added to the Tracker every day of the IRS campaign.

HOW TO USE SPRAY PERFORMANCE TRACKER



1. MEASURE SPRAY OPERATOR PERFORMANCE





Use the Team Leaders Summary Sheets to find spray performance data.

Add data on the following indicators to the Performance Tracker:

- Number of spray operators who worked (Section A)
- Number of structures found (Section A)

SECTION A



Spray Performance Tracker

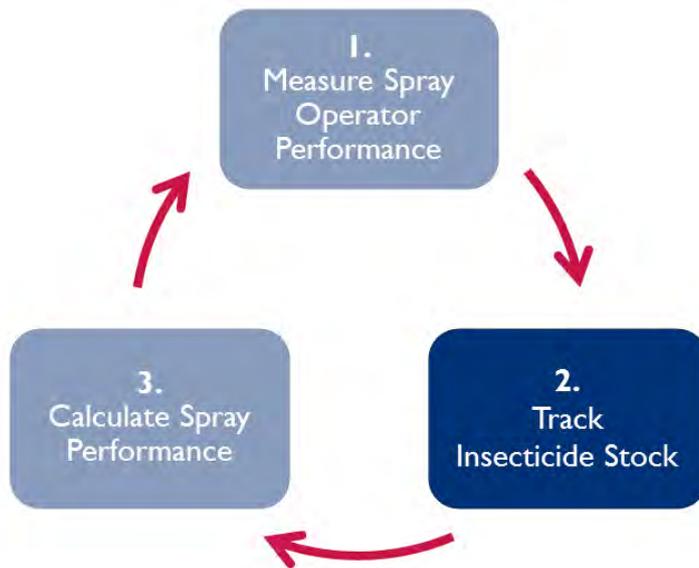
District																										
Operation Site																										
Supervisor												Tel:														
Store Keeper												Tel:														
Date																										
Day of Spray		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Number of Spray Operators [A]																										
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										
Number of Structures Found		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									

- Number of structures sprayed (Section B)
- Number of sachets used (Section C)

SECTIONS B AND C

PERFORMANCE RESULTS																										
Number of Structures Sprayed [B]		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										
Number of Sachets Used [C]		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										

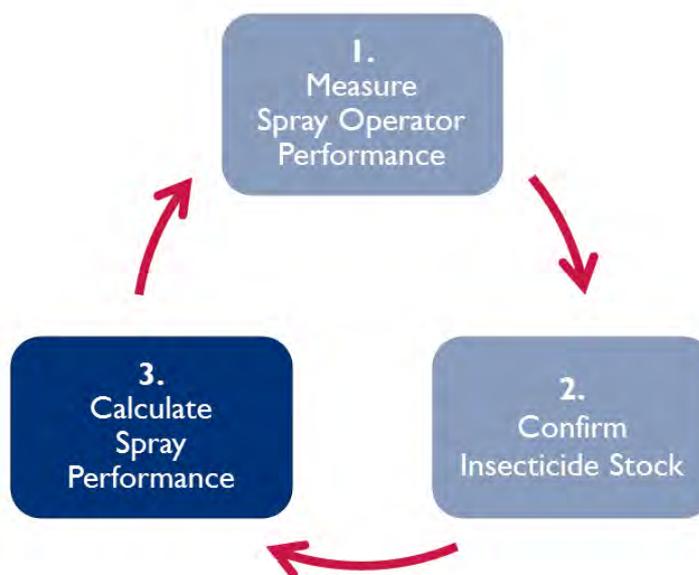
2. CONFIRM INSECTICIDE STOCK



To ensure that insecticide stock data are accurate, check them against the stock ledger, the stock issue notes, and the stock receipt notes. Check the accuracy of following information against the data you entered in the Performance Tracker in Sections B and C:

- Stock opening balance
- Stock received
- Stock issued
- Stock balance

3. CALCULATE SPRAY PERFORMANCE





This section shows the two performance indicators as calculated from the input data.

1. Number of structures sprayed ÷ number of sachets = average structures sprayed per sachet (See Section D.)
2. Total number of structures sprayed ÷ total number of spray operators ÷ total days = average number of structures sprayed per spray operator per day. (See Section E.)

SECTIONS D AND E

D	Average Number of Structures Sprayed per Sachet [D]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										
E	Average Number of Structures Sprayed Per Spray Operator [E]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										



HOW TO USE RESULTS

The Spray Performance Tracker will show you the performance of every spray team at the operating site on a daily basis. It will also show you the overall performance at the operating site. In addition, it will show you the performance to date on any given spray day.

- 1. Monitor staff performance.** Data will help you identify which teams (and team leaders) are performing to standard, and which ones are not.
- 2. Track insecticide usage.** If the insecticide usage rate is within target, you can be confident that the stock of insecticide procured will be enough to complete the campaign. If the rate is higher than projected, you are at risk of running out of insecticide. If this happens, contact your country operations manager immediately.
- 3. Ensure the spray campaign is completed on time.** If the number of structures sprayed per spray operator is on target, you can be confident that the spray campaign will be completed on time. If the number of structures sprayed per spray operator per day is lower than targeted, then the spray campaign will take longer to be completed, which would mean that extra resources would be required (personnel payments, vehicle rentals, etc.). If you are at risk of not completing the campaign on time, notify your country operations manager immediately.

PERFORMANCE RESULTS																										
Number of Structures Sprayed [B]		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										
Number of Sachets Used [C]		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										
Average Number of Structures Sprayed per Sachet [D]		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										
Average Number of Structures Sprayed Per Spray Operator [E]		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Team Leader 1	(Name)																									
Team Leader 2	(Name)																									
Team Leader 3	(Name)																									
TOTAL																										
CUMULATIVE																										

B

C

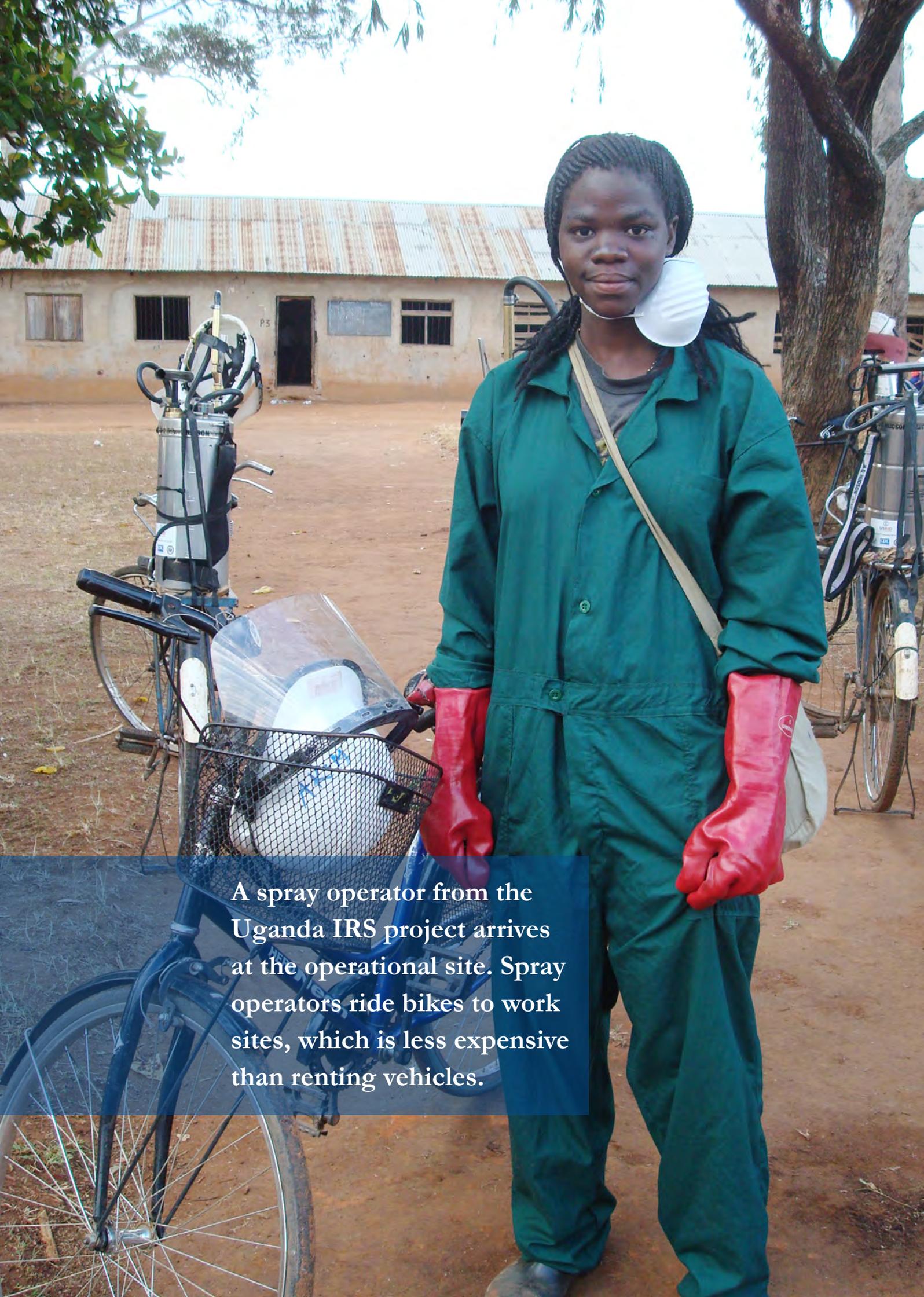
D

E

Formulae: **Targets:**

D = B/C **D:**

E = B/A **E:**



A spray operator from the Uganda IRS project arrives at the operational site. Spray operators ride bikes to work sites, which is less expensive than renting vehicles.

Environmental compliance

Pre-Season Environmental Compliance Assessment





Pre-Season Environmental Compliance Assessment

PURPOSE

The purpose of the tool is to guide a manager through an operational site assessment process, in order to be sure that all of the critical features are evaluated, that the results are documented, and that the report contains GPS and photographic evidence of the assessment. Further, by uploading the report and the attached files via wireless or 3G/4G, the assessment results will be available in near real-time to in-country and headquarters staff.

WHO SHOULD USE THIS TOOL?

The in-country Environmental Compliance Officer will be the primary user, but all other senior staff will be eligible to perform these assessments, including Chiefs of Party, Operations Managers, Technical Managers, and Logistical Managers.

WHEN SHOULD IT BE COMPLETED?

The assessment should be completed two months before spray operations and repeated two weeks before the spray campaign.

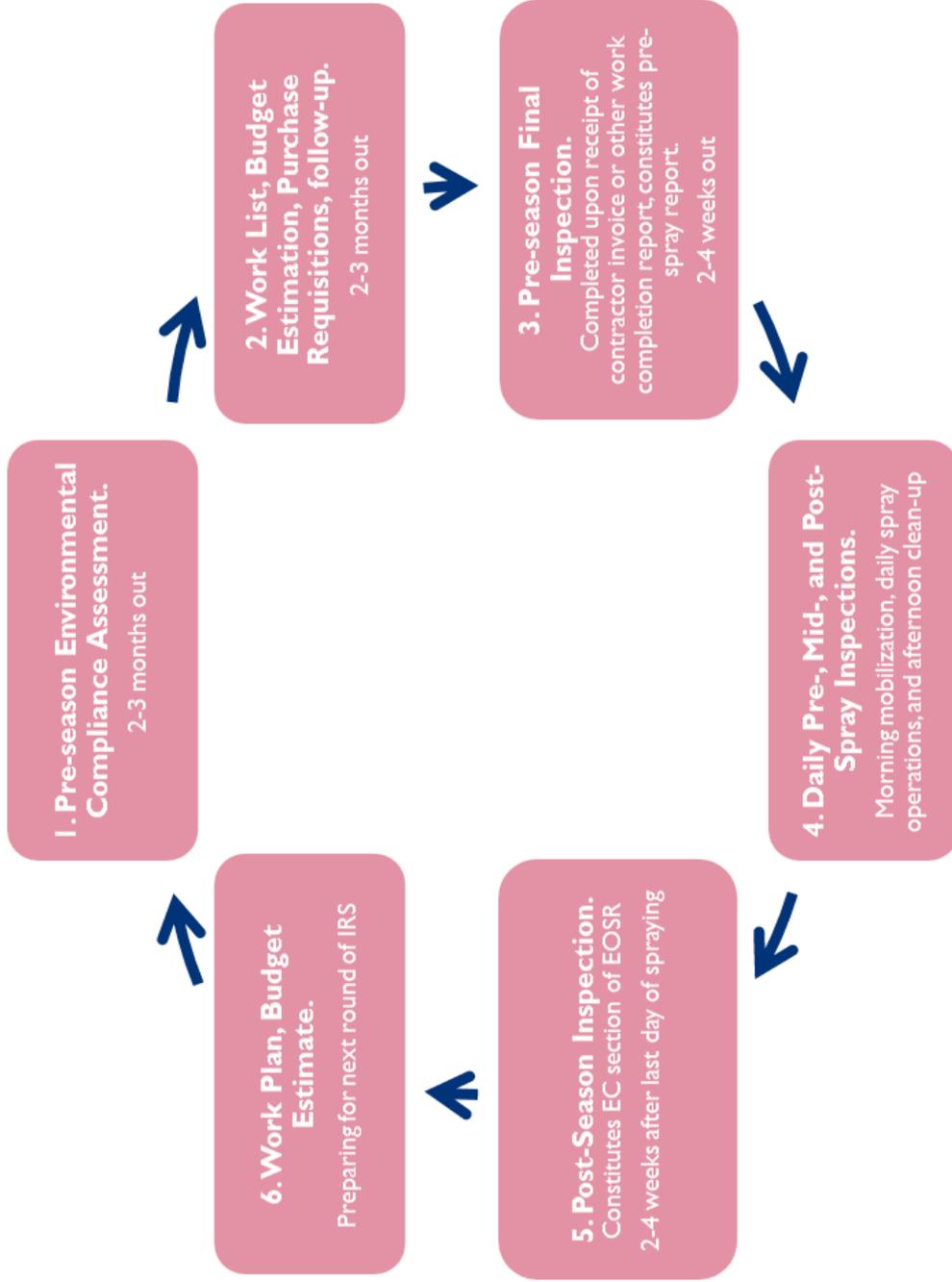
HOW DO YOU USE THE TOOL?

Project managers should visit operational sites and go through the Pre-Season Environmental Compliance Assessment, ticking off yes or no where appropriate, and answering the additional questions under the Comments section.

HOW TO USE RESULTS

The primary result of the use of the tool is the generation of a work-list of items that must be completed at the operational site prior to the commencement of spraying activities. The tool is also a supervisory device that verifies by GPS data that a site visit was made. In addition, the GPS data will eventually serve as a visualization tool to display and analyze the spatial characteristics of the country's operational sites. Finally, the photographs taken during the course of the assessment will be uploaded to a file-sharing system so that diverse staff can better visualize the condition of the operational sites.

ENVIRONMENTAL COMPLIANCE ASSESSMENT PROCESS



Pre-Season Environmental Compliance Assessment

Pre-Season Storeroom and Soak Pit Assessment
 Date of Inspection : ____/____/____
 Country: _____
 County: _____

GPS Coordinates
 Lat _____
 Long _____
 District _____
 Village: _____

Inspectors : _____

<u>BMP Requirement</u>	<u>Yes</u>	<u>No</u>	<u>Comments/Recommended Actions</u>	<u>Completion Date if Applicable</u>
Storage Facility				
Storage facility located an adequate distance from sensitive receptors (schools, homes, and water bodies/flood plains, etc.)		If no, take photo showing sensitive receptor	Distance to nearest sensitive receptor _____ m	
Is storage facility fenced?				
Double locks on pesticide storage				
Facility guarded 24 hrs/day				
Windows barred and screened				
Adequate lighting				
Danger signs with skull and crossbones				
Guards have boots, whistles, flashlights, and phones				
Pesticides properly labeled			Y) If yes, take photo of pesticide label with expiration date, then take photo showing amount in stock and storage condition. N) If no, take photo showing	

For all "No" responses, add related item to work list

Pre-Season Environmental Compliance Assessment

<u>BMP Requirement</u>	<u>Yes</u>	<u>No</u>	<u>Comments/Recommended Actions</u>	<u>Completion Date if Applicable</u>
Health and Safety Sheet laminated and posted				
Adequate PPE in inventory for the number of operators expected (Helmets, neck shield, face shield, dust mask, coveralls, gloves, socks, boots)		If No, get delivery date from Procurement, and add to work plan	Number of operators to work out of this operations center: _____ Number of full sets of PPE available: _____	
Are there: 1. First aid kits for storeroom and transport vehicles fully stocked (bandaids, gauze, antibiotic cream, eye wash, hydrocortisone cream/calamine, aspirin). 2. Spill kits for storeroom and for vehicles (Sand bucket, long handle brush with stiff bristle, shovel, fire extinguisher) 3. Health and Safety Sheets for transport vehicles		If No, get delivery dates from Procurement, and add to work plan	Number of transport vehicles expected to be used _____ Number of fully stocked first aid kits: _____ Number of spill kits in inventory: _____ Number of Health and Safety sheets: _____	
Emergency response procedure posted in stockroom (with phone numbers)				
Spill response procedure posted				
Insecticides past their expiration date			Expiration date of pesticides in inventory: ____/____/____ If expired, take photo of label showing expiration date, and photo showing the amount of expired pesticide.	
Containers for waste available and clearly marked				
Items in the storeroom stocked on pallets and separated according their type			Take photo showing overall storeroom condition.	
Maximum storage height (2 m) exceeded and/or				

For all "No" responses, add related item to work list

Pre-Season Environmental Compliance Assessment

<u>BMP Requirement</u>	<u>Yes</u>	<u>No</u>	<u>Comments/Recommended Actions</u>	<u>Completion Date if Applicable</u>
Recording thermometer in storeroom				
Fire extinguisher inside and outside storeroom				
Leak-free floor and roof			If no, take photo showing defects.	
Soap and water available				
Antidotes to pesticides available nearby`			Distance to nearest health facility _____	
Storeroom supervisors know signs of poisoning and location of nearest treatment facility			Date of storekeeper training ____/____/____	
Prepared to administer pregnancy tests				

For all “No” responses, add related item to work list

Pre-Season Environmental Compliance Assessment

<u>BMP Requirement</u>	<u>Yes</u>	<u>No</u>	<u>Comments/Recommended Actions</u>	<u>Completion Date if Applicable</u>
Soak Pit				
Is this soak pit located near an IRS storage Facility?				
Is the soak pit located away from water bodies, steep slope or flood prone area?		If no, take picture		
Is the soak pit correctly fenced, gated, locked & strongly built to hang pumps?			Take picture showing condition of soak pit and fencing	
Is there an adequate water supply for clothes washing and triple rinse of pumps?		If no, get delivery date from Procurement and add to work plan		
Are soak pit and surroundings cleared of vegetation and cleaned?				
Are the washing areas properly sloped to drain to the soak pit, with no leaks or cracks?		If no, take picture showing defects		
Does the sawdust, charcoal, and gravel appear to be adequate & well placed and prepared to act as a filter?				
Are there lines to dry the clothes and are they strong enough to carry the load.				
Are there skull and crossbones hazard signs on the fence?				
Are there showers and toilets with adequate privacy and drainage present? (male/female)				

For all "No" responses, add related item to work list



Spray operators
in Ethiopia.

Monitoring & evaluation

M&E Error Eliminator





M&E Error Eliminator

PURPOSE

This tool is designed to check the completeness and correctness of data collected in the field – i.e. ensure forms are filled out fully and properly. To this aim, the tool highlights common errors that have been reported from the field so that they can be quickly identified and corrections can be effectively provided by the supervisor. Additionally, a short checklist is provided to assist with data review.

WHO SHOULD USE THIS TOOL?

Any supervisor or manager. Mobilization Supervisors, Team Leaders, District Coordinators, Operations Managers, M&E Managers.

WHEN SHOULD IT BE COMPLETED?

The Error Eliminator should be completed during visits to the field during mobilization/spraying. Randomly select a number of data collectors' forms to review either while Mobilizers/Spray Operators are collecting data or at the end of the day when data collectors are turning forms into supervisors.

HOW DO YOU USE THE TOOL?

1. Check mobilization and spray operator forms for the common errors outlined in the tool.
2. If errors are found, provide corrections to data collectors and the supervisors.
3. Make sure that the supervisor is checking for errors before accepting forms and that he/she is providing corrective feedback to the data collectors as needed.
4. If systemic errors are being found, which is common at the beginning of mobilization/spraying, supervisors should hold a meeting to review data collection protocols and provide feedback.

It is essential that supervisors check data collection form for accuracy BEFORE they are sent to the data center to be entered into the database.

HOW TO USE RESULTS

Provide daily feedback through use of the tool until errors are eliminated from completed data collection forms.

EXAMPLE OF MOBILIZER FORM FROM NIGERIA, ONE IRS CARD PER HOUSEHOLD



Indoor Residual Spray Campaign BCC/IEC MOBILIZATION/ELIGIBLE STRUCTURE ENUMERATION FORM

Date _____ State _____ LGA _____ Ward _____ Community/settlement _____
 Name of Mobiliser _____ Code of Mobiliser _____ Signature of Mobiliser _____

Name of Head of Household	Serial No. of Eligible Structure		Total # Eligible Rooms Found	Eligible Structure Sensitized?		If not sensitized, why?	# Persons reached with IRS messages (sensitized)?			Acceptance of IRS		BCC/IEC Materials
	IRS Card Household ID	01, 02, 03, etc.		Yes	No		# Males	# Females	# Total	Yes	No	
TOTALS												

Reason for not mobilizing: 1= Nobody present, 2= Adult not present, 3= Refused, 4= Other
 * DO NOT ADD, indicate most common reason

Name of Team Leader _____ Arithmetic Verified Y NO Physical Spot Check Y NO Date Verified _____ Signature _____
 Name of Supervisor _____ Arithmetic Verified Y NO Physical Spot Check Y NO Date Verified _____ Signature _____
 Date entered BY TOTAL: Name of Data Clerk _____ Code of Data Clerk _____ Signature _____ Date Data Entered _____

EXAMPLE OF SPRAY OPERATOR FORM FROM NIGERIA, ONE IRS CARD PER HOUSEHOLD



Indoor Residual Spray Campaign DAILY SPRAY OPERATOR FORM

Date _____ State _____ LGA _____ Ward _____ Community/settlement _____

Name of Spray Operator _____ Code of Spray Operator _____ Team Lead _____ Team Number Signature of _____

Sachets Received _____ Sachets Full Returned _____ Sachets Empty Returned _____

Name of Household	Serial No. of Eligible Structure	Eligible Structures						Eligible Rooms			Signature/ Fingerprint of household representative who witnessed spraying												
		Sprayed			Unsprayed			Found	Sprayed	Mosquito nets													
		Sprayed? (TICK for yes)	Total Pop M F	Pregnant Women <5	Children <5	Not Sprayed? (TICK for yes)	Reason			Total Pop M F		Pregnant Women <5	Children <5	Used by Children <5	Used by pregnant women								
	01, 02, 03, etc.																						
	-																						
	-																						
	-																						
	-																						
Total																							

Reason for not spraying: 1= Sick, 2= Locked, 3=Funeral, 4=Denied/Refused, 5= Missed, 6= No longer eligible, 7=Other
*DO NOT ADD, indicate most common reason

Name of Team Leader _____ Arithmetic Verified YES NO Physical Spot Check YES NO Date Verified _____ Signature _____

Name of Supervisor _____ Arithmetic Verified YES NO Physical Spot Check YES NO Date Verified _____ Signature _____

Date entered BY TOTAL: Name of Data Clerk _____ Code of Data Clerk _____ Signature _____ Date Data Entered _____

EXAMPLE OF MOBILIZER FORM FROM RWANDA, ONE IRS CARD PER STRUCTURE



Indoor Residual Spray Campaign BCC/IEC MOBILIZATION/ELIGIBLE STRUCTURE ENUMERATION FORM

Date _____ District _____ Sector _____ Cell _____ Village _____
 Name of Mobiliser _____ Code of Mobiliser _____ Signature of Mobiliser _____

Name of Head of Family	IRS Structure Card Serial #	Eligible Structure Sensitized?		If not sensitized, why?	# Persons reached with IRS Messages (sensitized)		Acceptance of IRS		# of BCC/IEC Materials Distributed
		Yes	No		# Males	# Females	Yes	No	
TOTALS	# of Eligible Structures Found --->								

Reason for not mobilizing: 1= Nobody present, 2= Adult not present, 3=Refused, 4=Other
 * DO NOT ADD this column

Name of Cell Supervisor _____ Arithmetic Verified Y NO Physical Spot Check Y NO Date Verified _____ Signature _____
 Name of Sector IEC Assistant _____ Arithmetic Verified Y NO Physical Spot Check Y NO Date Verified _____ Signature _____
 Date entered BY TOTAL: Name of Data Clerk _____ Code of Data Clerk _____ Signature _____ Date Data Entered _____

EXAMPLE OF COMMON ERRORS FOR SPRAY OPERATOR AND MOBILIZATION FORMS

Correct numbering of households and structures for countries that provide **one IRS card per household**.^{1,2}

NUMBERING ERRORS FOR IRS CARD HOUSEHOLD ID COLUMN

Error: The IRS Card Household ID number only has 5 digits; in this example, the correct format is a 6 digit number (#####).

Name of Head of Household	Serial No. of Eligible Structure		
	IRS Card Household ID	-	01,02,03, etc.
Musa Ahmadu	002015	-	01,02,03
Adamu Shehu	002016	-	01
Sani Isa	002017	-	02
Ismaila Usman	002018	-	0011
Amadu Tanko			01
Ernest Oboyo	02020	-	01
Ernest Oboyo	02020	-	02
Fatima Umar	002021	-	
Total	Total number of Eligible structures	-	24

Error: IRS Card Household ID is missing for this entry; without this, the data cannot be entered into the database.

CORRECT NUMBERING FOR IRS CARD HOUSEHOLD ID COLUMN

Correction: All IRS Card Household IDs have the correct number of digits, in this example, 6 digits.

Name of Head of Household	Serial No. of Eligible Structure		
	IRS Card Household ID	-	01,02,03, etc.
Musa Ahmadu	002015	-	01
Musa Ahmadu	002015	-	02
Musa Ahmadu	002015	-	03
Adamu Shehu	002016	-	01
Sani Isa	002017	-	01
Ismaila Usman	002018	-	01
Amadu Tanko	002019		01
Ernest Oboyo	002020	-	01
Ernest Oboyo	002020	-	02
Fatima Umar	002021		01
Total	Total number of Eligible structures		10

Correction: Notice that there are no blank cells in the table; this is a complete table.

¹ And collect data **per structure**

² Angola, Benin, Ethiopia, Ghana, Liberia, Mali, Nigeria, and Senegal



NUMBERING ERRORS FOR STRUCTURE IDENTIFIER (01,02,03, ETC.) COLUMN

Error: For HH ID 0002017, the Structure Identifier should start at 01, not 02. (i.e., not picking up where the previous HH number left off.)

Error: The total number of structures was arrived at by summing up all the Structure Identifiers shown in the structure column.

Name of Head of Household	Serial No. of Eligible Structure		
	IRS Card Household ID	-	01,02,03, etc.
Musa Ahmadu	002015	-	01,02,03
Adamu Shehu	002016	-	01
Sani Isa	002017	-	02
Ismaila Usman	002018	-	0011
Amadu Tanko		-	01
Ernest Oboyo	02020	-	01
Ernest Oboyo	02020	-	02
Fatima Umar	002021	-	
Total	Total number of Eligible structures	-	24

Error: Three structures are all listed in one row.

Error: The Structure Identifier should start at 01. Also, the Structure Identifier should be a 2 digit number (##), not 4 (####).

Error: The Structure Identifier has been left empty; without this, the data cannot be entered into the database.

CORRECT NUMBERING FOR STRUCTURE IDENTIFIER (01,02,03, ETC.) COLUMN

Correction: All Structure Identifiers for households always start the numbering with number 01, subsequent structures are denoted as 02, 03, etc. depending on the number of structures counted.

Name of Head of Household	Serial No. of Eligible Structure		
	IRS Card Household ID	-	01,02,03, etc.
Musa Ahmadu	002015	-	01
Musa Ahmadu	002015	-	02
Musa Ahmadu	002015	-	03
Adamu Shehu	002016	-	01
Sani Isa	002017	-	01
Ismaila Usman	002018	-	01
Amadu Tanko	002019	-	01
Ernest Oboyo	002020	-	01
Ernest Oboyo	002020	-	02
Fatima Umar	002021		01
Total	Total number of Eligible structures		10

Correction: The number of structures is clearly shown for Musa Ahmadu with each structure occupying a separate row and all the identified structures bearing one IRS card Household ID.

Correction: The total number of eligible structures is the count of entries made on the form. Here there are 10 entries so the total is correctly shown as 10.

Correct numbering of households and structures for countries that provide **one IRS card per structure**.³

NUMBERING ERRORS FOR IRS CARD/STRUCTURE ID COLUMN

Error: The IRS Card Household ID number only has 5 digits; in this example, the correct format is a 6 digit number (#####).

Name of Head of Household	IRS Card/Structure ID		
Musa Ahmadu	002015, 002016		
Adamu Shehu	002017		
Sani Isa	002018		
Ismaila Usman	00219		
Shehu Garba	002020		
Amadu Tanko			
Ernest Oboyo	02022, 02023		
Fatima Umar	002024		
Total	Total number of Eligible structures	14350	

Error: The two structure IDs for Musa Ahmadu's are written on one line.

Error: IRS Card Household ID is missing for this entry; without this, the data cannot be entered into the database.

Error: The total number of structures was arrived at by summing up all the structure IDs shown in the structure column.

CORRECT NUMBERING FOR IRS CARD/STRUCTURE ID COLUMN

Correction: Here all IRS Card Household IDs have the correct number of digits, in this example 6 digits

Name of Head of Household	IRS Card/Structure ID		
Musa Ahmadu	002015		
Musa Ahmadu	002016		
Adamu Shehu	002017		
Sani Isa	002018		
Ismaila Usman	002019		
Shehu Garba	002020		
Amadu Tanko	002021		
Ernest Oboyo	002022		
Ernest Oboyo	002023		
Fatima Umar	002024		
Total	Total number of Eligible structures	10	

Correction: Each structure ID belonging to Musa Ahmadu is occupying a separate row.

Correction: Each structure ID belonging to Ernest Oboyo is occupying a separate row and has the correct number of digits, in this example 6 digits.

Correction: Notice that there are no blank cells in the table; this is a complete table.

Correction: The total number of eligible structures is the count of entries made on the form. Here there are 10 entries so the total is correctly shown as 10.

³ Madagascar, Mozambique, and Rwanda



COMPLETENESS AND CORRECTNESS CHECK FOR COLLECTED DATA

Data Completeness and Correctness	Yes	No
Is all header information (geography, name of data collector, code of data collector, sachet information, etc.) completely and correctly filled out?		
Has all required information been filled out for each line of data?:		
• Head of household		
• IRS card number		
• Structure number		
• Sprayed or not sprayed (and corresponding population information or reason)		
• Room information		
• Mosquito net information		
Has each data collection column been filled?		
Is all footer information (supervisor name, signature, date of verification, etc.) filled out in full?		
If a figure is supposed to be zero, has the data collector written zero rather than leaving the cell blank or putting a dash?		
Logic Checks		
Is the number of eligible rooms sprayed less than or equal to the number of eligible rooms found?		
If there are people sleeping under the bed nets, does the house actually report having bed nets?		
Is the number of pregnant women using a mosquito net less than or equal to the number of pregnant women living in the household?		
Is the number of children < 5 using a mosquito net less than or equal to the number of children < 5 living in the household?		

MOBILIZATION FORM EXCERPT

Eligible Structure/ Household Mobilized?		If not mobilized, why?	# Persons Reached with IRS Messages ⁴ (mobilized)		Acceptance of IRS		# of BCC/IEC Materials Distributed
Yes	No		# Males	# Females	Yes	No	

These figures should count the number of adults (or children over 14 years of age) present at the time of the mobilization who *listened* to the IRS messages delivered by the mobilizer. This is NOT a count of the number of males and females *living* in the structure/household.

This should be the count of the # of BCC/IEC materials distributed; this # includes pamphlets; it does NOT include IRS cards or structure identification stickers.

If a structure is noted as **NOT mobilized**, this cell *must* be filled. If a structure is noted as **mobilized**, this cell *must* be empty.

If a structure/household is noted as **mobilized**, it should be noted whether or not the household has said they would accept IRS.

⁴ Who counts as “adults reached with IRS messages” might vary depending on the country. In some countries they count anyone over 14 years of age that heard IRS messages, others count only 18 years olds and above.



DAILY SPRAY OPERATOR FORM EXCERPT

If a structure is noted as **sprayed**, protected population information must be filled.

If a structure is noted as **NOT sprayed**, a code denoting the reason it was not sprayed, must be filled.

Eligible Structures									Eligible Rooms	
Sprayed? (TICK for yes)	Sprayed			Unsprayed					Found	Sprayed
	Total Pop	Pregnant Women	Children < 5	Not Sprayed? (TICK for yes)	Reason*	Total Pop	Pregnant Women	Children < 5		
<input type="checkbox"/>				<input type="checkbox"/>						

Only one of the boxes can be ticked in a single row.

There cannot be more pregnant women, nor more children under 5, than total population.
EX: You cannot have only 2 noted in the total population cell, but have 3 in the pregnant women cell.

Notes

Notes



