

# Improving Efficacy & Efficiency of IRS

Allan Were  
Abt Associates Inc

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RBM VCWG  
IRS Work Stream

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# PMI AIRS at a Glance

- ▶ Working in 15 African countries
- ▶ Protected nearly 30 million
- ▶ PMI AIRS Conducts
  - Spray Operations
  - Entomological Monitoring
  - Environmental Compliance
  - Monitoring and Evaluation
  - Information, Education and Communication



# Budget Showdown

- ▶ Shift to more expensive insecticide formulations.
  - Price of Organophosphates is about double that of carbamates, and about 10 times that of pyrethroids.

- ▶ Shrinking budgets

- ▶ Perception that IRS is “too expensive”



- ▶ *Our goal: To cover as many beneficiaries as were being covered before the shift to the higher-priced insecticide*



# ■ Key Drivers of Operational Costs

The key factors are all related to the length of a spray campaign. These costs are incurred on a per-day basis;

- ▶ Vehicle rentals
- ▶ Seasonal workers
- ▶ Rental of warehouses and operation sites



# Human Resources (Seasonal Workers)

- ▶ There are two kinds of seasonal workers engaged during spray campaigns;
  - Workers whose numbers are directly related to the length of the spray campaign
  - Workers whose numbers are independent of the length of the spray campaign







# Seasonal Workers directly linked to the spray campaign

**Challenge:** HR costs directly related to number of people and number of days they work

**Solution:** Reduce the length of the spray campaigns

- Increased the number of spray personnel
- Increased daily output/productivity of spray operators
  - Pay attention to spray calendars to minimize redundant time
  - Use community mobilization to reduce the time it takes to make homes ready for spraying
  - Clearly communicate and monitor performance expectations to spray teams



## Other Seasonal Workers

- ▶ Structural changes were made to reduce the HR costs not directly related to spraying, especially “mobilization”–related costs.
  - For example, alternative modes of conducting community mobilization were implemented, such as:
    - Embedding mobilizers in spray teams
    - Shortening the length of mobilization campaigns by mobilizing households closer to their actual day of spraying
    - Utilizing alternative communication channels – radio, community meetings, etc.



# Vehicle Rentals

## Challenge

- The # of vehicles and # of rental days needed to be reduced

## Solutions

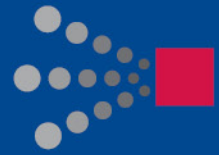
- Reduced the lengths of the campaigns
- Hired vehicles that carry more people (larger volume vehicles are normally cheaper per unit)
- Optimized daily use of vehicles by staggering the daily spray start times by team
- Reduced the number of days vehicles were engaged during campaigns (in many cases, vehicles are not required during the final days of a campaign)





# Costs of Change

- ▶ A few cost will go up as a result of these initiatives, including:
  - Supervision
  - Spray equipment
  - Personal Protective Equipment (PPE)
  
- ▶ However, the reduction in overall cost far outweighs the increases arising from the initiatives



# A Closer Look in Benin – 2014

## ▶ Challenge

- Approximately 240,000 houses were targeted for spraying.
- A switch in insecticide type doubled cost of insecticide.
- Total budget for campaign remained the same.

## ▶ Options

- Scale back campaign and cover fewer beneficiaries
- Restructure operations to protect all targeted beneficiaries





# A Closer Look in Benin

## ▶ Solution

- Spray campaign was reduced from 32 to 19 days.
- # of seasonal workers increased from about 450 to 900
- # of community mobilizers decreased from 500 to 170

## ▶ Result

- Greater efficiency = All targeted beneficiaries reached



# Conclusion

- ▶ Increased cost of insecticide required us to work smarter to reach the same number of beneficiaries.
- ▶ Available options to increase cost efficiencies vary by country. The operating contexts are different in each country.



# Thank you!



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