The Vector Control Challenge

A proven tool: **Vector Control**

The threat: **Insecticide Resistance**

- Since 2000
  - 663 million clinical cases of malaria averted
  - 68% of malaria cases averted by ITN
  - 11% of malaria cases averted by IRS

- Increasing incidence and scope
- Rapid development
- Resistance to all four classes
- Entomological impact understood
- Operational impact harder to assess

First programme use of Actellic CS: Impact in a region of high pyrethroid resistance

Bunkpurugu-Yunyoo district, Northern Ghana

- Mosquitoes Susceptible in 2010
- Resistant by 2012
- Surveys of 824 children under-five.
- Data collected on IRS, ITN ownership and usage, fever in children under-five and anti-malarial treatment.
- For children under 5, height, weight and temperature measured, and capillary blood collected and tested for malaria parasitaemia and anaemia.

The first example of Third Generation IRS in action (3GIRS= long lasting resistance Breaking IRS Formulation)
**IRS Coverage has fallen in Africa**

<table>
<thead>
<tr>
<th>Company</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMCP</td>
<td>The commodity price is way too high. We may stop IRS altogether. 6 month forecast is impossible.</td>
</tr>
<tr>
<td>Funder (PMI / GFATM /....)</td>
<td>Early results are outstanding. We have to reduce coverage if we use this product.</td>
</tr>
<tr>
<td>MACEPA</td>
<td>This might be a breakthrough in elimination strategy. Countries have little experience of using non-pyrethroids and none in long lasting IRS.</td>
</tr>
<tr>
<td>Company (Syngenta)</td>
<td>The market is tiny and chaotic. Every order is an event. There is no forecast. So cannot book mfr capacity. The Cost effectiveness of this product is better than other non-pyrethroids.</td>
</tr>
</tbody>
</table>

![Chart showing IRS coverage in Africa](chart.png)
Underlying causes of market shortcomings

- High Price
- Low uptake / Small market
- No Forecast / Long Lead times
- One Supplier
- Weak evidence of Impact / Cost effectiveness
Reversing the spiral: Next Generation IRS

Underlying Causes of Shortcomings
- High Price
  - Weak evidence of Impact / Cost Effectiveness
- Low Uptake / small market
  - One Supplier
  - No Forecast / Long Lead times

Market Shaping Intervention
- Reduce Price
  - Complete evidence of Impact and Cost Effectiveness
- Increase Uptake / coverage
- Forecast and underwrite Demand

Building Partnerships • Creating Solutions • Saving Lives
Goal, Outcome and Outputs

• The **OVERALL GOAL** of this proposal is:

• **Increased use of 3GIRS products in Insecticide Resistance Management Programmes”**

• “**A growing market for 3GIRS without intervention of a co-payment.”**

• 1 Accelerated uptake of 3GIRS through co-payment mechanism
• 2 Improved global forecast for 3GIRS products
• 3 New quality assured products from several manufacturers available
• 4 3GIRS products are reduced in price
• 5 Cost effectiveness and impact research evidence is disseminated
NgenIRS Project First Year

• First Year
  • Ethiopia
  • Ghana
  • Mali
  • Mozambique
  • Zambia

• Second Year potential
  • Benin
  • Tanzania
  • Uganda
  • Senegal
  • Madagascar
  • Rwanda
  • Zimbabwe
Widespread support

- African Leaders Malaria Alliance
- WHO Global malaria Programme

- Country programmes
  - Ethiopia
  - Ghana
  - Mali
  - Mozambique
  - Zambia

- Industry partners
- Croplife (Industry association)
What is the status today?

- The NgenIRS project is up and running!
- See ngenirs.org