Scaling up IRS in Tanzania

IRS working group, 8th Annual Meeting, Geneva, Switzerland
28th - 30th Jan 2013

Dr Renata Mandike
NMCP
Outline

• Overview malaria.
• IRS scale up
• Shrinking IRS operations
• Expanding to new areas
• Challenges.
• Way forward.
United Republic of Tanzania

Mainland:
- 43 million
- 900,000 km²

Zanzibar:
- 1.3 million
- 2,500 km²
The burden in Tanzania Mainland

- Tanzania has the *third (3rd) largest* population at risk of malaria in Africa after Nigeria and DRC.
- Reported malaria cases 10-12 million annually
- Leading cause of Outpatient, Inpatient and Hospital deaths in underfive children
- Misclassification of cases pose great challenges in assessing disease trend over time
- The poorest bear the brunt of the burden
Malaria medium term strategic plan 2008-2013

- Prompt diagnosis & treatment
- Intermittent preventive treatment in pregnancy (IPTp)
- Insecticide-treated nets (ITNs)
- Indoor residual spraying (IRS)
- Larviciding

Plus...
- Monitoring & evaluation
- Surveillance &
- Behavior Change Communication
Targets:

• At least 80% of people at risk of malaria are protected using appropriate vector control methods.

• At least 80% of malaria patients are diagnosed and treated with effective anti malaria medicines within one day of the onset of illness.

• At least 80% of all pregnant women are receiving intermittent preventive treatment in areas where malaria is stable.

• Reduce malaria mortality by 50% by the year 2013.
IRS in the Lake Zone
2007-2012
IRS implementation

• Kagera selective application since 2007 (outbreak prevention)
  – 100,000 households targeted (0.5 million people)
• Expansion to all districts of Kagera in 2009 (high transmission)
  – 450,000 households targeted (2.2 million people)
• Further expansion to Mwanza/Mara Regions in 2010
  – 1,250,000 households targeted (6.5 million people)
IRS implementation..

• All households sprayed with lambda-cyhalothrin (ICON®)

• In 2011/12: targeted IRS was introduced in Muleba district and shift from pyrethroids to carbamate as resistance mitigation

• Implemented in collaboration with Local authorities, Communities, RTI, with PMI support
IRS Scale Up 2007-2012

Lake zone:
• 100,000 SqKm (1/4 country)
• App. 6.5 million people (1/6 of country population)
Quality of spraying

• In 2011/12 IRS, BQK introduced to supplement routine supervision and monitoring on quality of spraying with bendiocarb

• Between March and April, 2012 a total of 1,347 samples were collected from 251 randomly selected houses

• 83% of samples had optimal concentration of insecticide, 13% semi optimal and 4% no insecticide

• Results were used to rectify the situation
IRS scale in the Lake zone 2006/7 to 2011/12 (number of structures sprayed/year)

Number of house hold sprayed per year

- 2006/07: 34,745
- 2007/08: 95,548
- 2008/09: 185,217
- 2009/10: 425,118
- 2010/11: 1,144,621
- 2011/12: 1,175,792
IRS scale in the Lake zone 2006/7 to 2011/12_population protected

- Population protected increased from 167,871 people in 2007 to over 6.5 million in 2011/12
Changing IRS operation from Blanket to targeting
Shrinking IRS in Muleba district
Malaria admission per 10,000 population in underfives in year 2008

- Green: 3 - 250
- Light Green: 251 - 500
- Yellow: 501 - 750
- Orange: 751 - 1000
- Red: 1001 - 5000

Expanding IRS to New areas

- Need to identify where IRS can make a difference (stratification)
  - Tool to knock down malaria in high transmission
  - Tool to progress to elimination in moderate - low transmission
  - Outbreak prevention/response
- Combination with LLINs
- Other factors
Percent children age 6-59 months testing positive for malaria by RDT (THMIS 2011/12_ preliminary)
Making decision on new areas for IRS
Challenges

• Insecticide resistance and limited insecticide options
• Capacity building
• Combining LLIN and IRS
• Monitoring quality of spraying
• Funding and sustainability
Way forward with IRS

• Integration with other VC
• Stratification to target interventions
• Intensify resistance and entomological monitoring
• Finalise Resistance mitigation plan
• Strategic plan development and Mobilization of funds
Asanteni sana.