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# Access: - Infant and Maternal Health Programme Evaluation

FARST Africa

Irish Aid
An Roinn Gnóthaí Eachtracha agus Trádála
Department of Foreign Affairs and Trade

Healthy children for a healthy world

# AIM Health Evaluation

- **FARST Africa** engaged as **Independent Consultants** to conduct the Evaluation.
- Mixed Methods Approach: **Quantitative and Qualitative** with **document review**.
- **10 ADPs** and 5 Comparison sites
- Incorporated **IQA** for ttC, COMM and CVA.
- Data modelled in **LiST to estimate** achievement of **Goal**
- **Final Programme-wide Report** submitted **April 25th** 2016
- **Five Country Reports** submitted July 2016

# Evaluation Purpose & Objectives

The **overall purpose** of the evaluation was to measure improvements in maternal and child health and nutrition in the areas where AIM -Health was implemented.

Specifically the evaluation answered four primary questions:

- Did the programme contribute towards any **observed statistically significant changes in MNCH and nutrition indicators**?
- What is the probable **impact on neonatal, under-five mortality and maternal mortality** based on values from baseline and final assessments and using the mathematical modelling tool called Spectrum LiST (Lives Saved Tool)
- What are the possible **mechanisms at work behind the programmatic approach** and what is the programmatic relevance of each?
- Did the programme have any **limitations, risks and threats**?

# Evaluation Design

**Mixed Methods Approach:**

Quantitative: Household surveys were conducted in **all AIM Health ADPs, and in one comparison ADP** in each country.

Qualitative: **FGDs** and **KIIs at community, district, national, Ireland and Global level**

Document Review: Health Facility Records, Programme Documents etc.

**Quantitative Sampling design**:

- **2-stage cluster sampling design**
- **Statistical confidence: 95%**
- **Statistical power: 80%**
- **6,349** households sampled: **139%** of expected sample size

Data Collected using Open Data Kit (ODK) based tool on smartphones /Personal Device Assistant platforms

# Analysis of Programme Impact: LiST

Lives Saved Tool (LiST): mathematical modelling tool that **estimates the impact of project interventions** based on **cause-specific evidence** of their effect on mortality.

To conduct LiST analysis: AIM **Health engaged Global Health Fellows/interns** in each programme country.

Entered coverage values from baseline, midterm and endline to obtain estimate data on # of lives saved, deaths averted and changes to in **maternal, neonatal and under-five mortality**.

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*Hawa Kpanabom and her daughter Lucy from Bonthe District, Sierra Leone*

# AIM Health Evaluation

# Results

# Programme Impact

- **Neonatal mortality:** **Reductions across all sites. Attaining and surpassing the 20% target in all but one.** Improvements in exclusive breastfeeding, hygiene practices, antenatal care attendance and skilled birth attendance have contributed to these results.

- **Under-five mortality:** **Reductions in seven sites, with target achieved in 6.** Can be attributed to the treatment of childhood illnesses, Vitamin A and immunisation coverage, as well as improved hygiene practices. The rate worsened in Sierra Leone due to decline in Vitamin A and immunisation coverage for children, following the Ebola outbreak.

- **Maternal mortality:** While **improvement has been recorded in all programme sites**, Target achieved in three and close to target in two. Driven significantly by increases in antenatal care and skilled birth attendance rates, the **lower levels for West Africa** are related to the lower coverage levels of health facility services during pregnancy and delivery, e.g. management of pre-eclampsia

# Children and their Mothers are well nourished

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**Breastfeeding practices**: Target of 80% EBF attained in all Programme sites.

**Children's Intake of Iron-rich foods**: Target of 85% achieved in 6 sites,

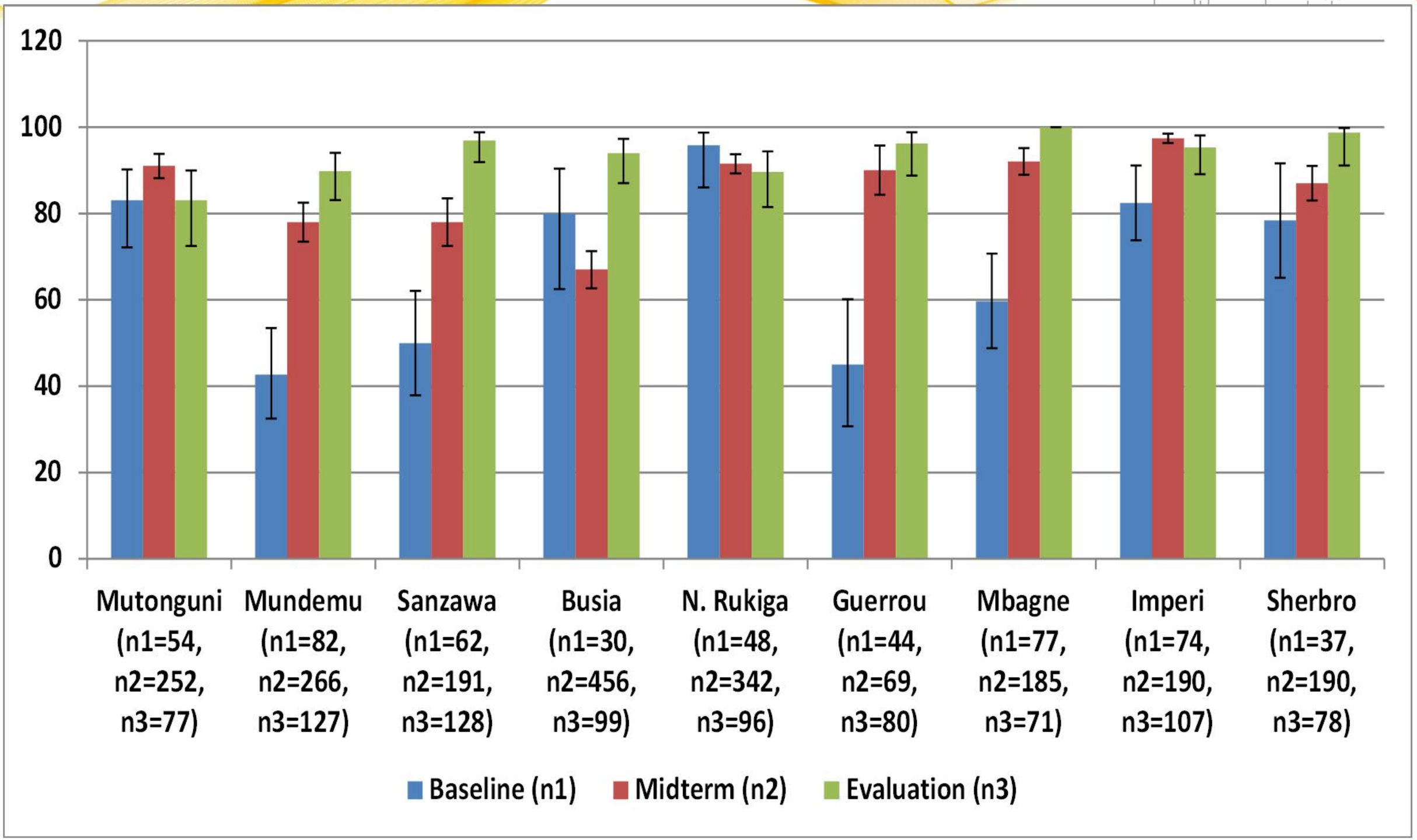
**Mothers' Intake of Iron-rich foods**: 90% target attained in all sites

Driven by importance placed on iron intake by CHWs & communities mobilisation by COMMs to take part in nutrition awareness sessions,

However output level: Diet Diversity (PW/CH): not attained in any ADP and Minimum Meal frequency: 2 ADPs for CH and none for PW

Qualitative: Food security experienced in all locations

**Vitamin A supplementation**: Target not attained. Consistently high in N.Rukiga & Guerrou. Sustained decline over programme period in 7 sites.




Exclusive Breastfeeding (0-5m)- Previous 24 hours


Poor Diverse Diet (Mundemu)
Inadequate Meal Frequency (Sherbro)
Delayed Initiation of Breastfeeding (Sanzawa)
Fever (Sanzawa, Mbagne)
Handwashing (Mutonguni, Sherbro)
Stunting
Diarrhoea (Mundemu, Ugandan sites)
Sufficient Water (Mundemu, Sherbro)
ARI (Mundemu)
Safe water (Guerrou, Sherbro)


Delayed initiation of Breastfeeding (Imperri)
Handwashing (Guerrou)
Fever (Mundemu, Sherbro)
Inadequate Meal Frequency (Sherbro)
Poor Diet Diversity (N. Rukiga)
Wasting

# Protection from infection and disease

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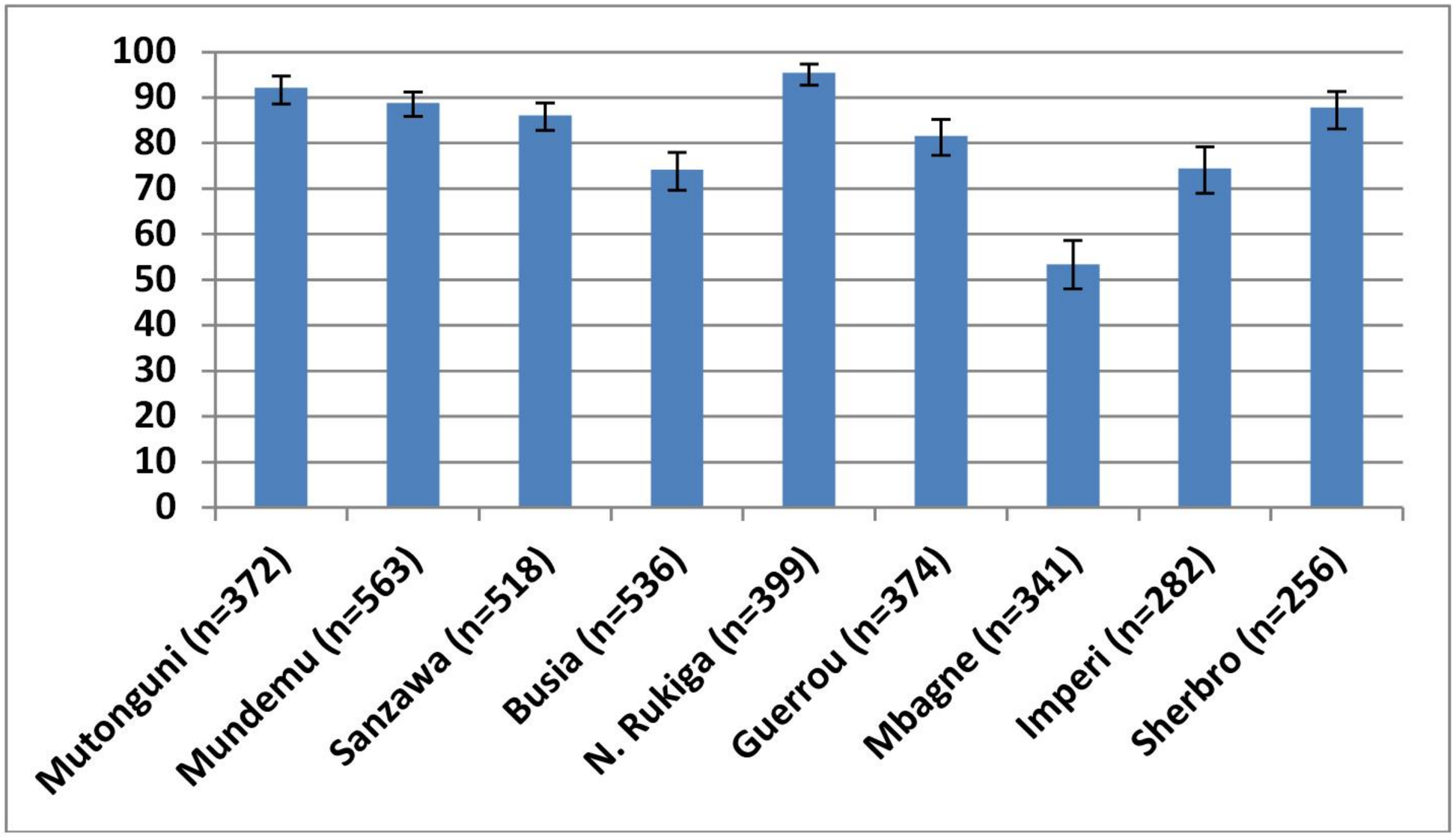
**Immunization**: Mixed results. 90% target attained in N. Rukiga. High and constant across 6



# Continued

**ARI Prevalence**: Target of 50% attained in 6 sites

**Careseeking for ARI**: increased consistently from baseline -midterm-endline in 6 sites.

**Fever Prevalence**: 50% decrease target attained in three sites. Sharp increase at midterm, followed by sharp decline in 8 sites.

**Careseeking for fever**: Not much significant change in all programme sites (overlapping confidence intervals).

**Prevalence of Diarrhoea**: 15% target attained in Mutonguni (15%-6%), Busia (44%-14.5%) and decline Sierra Leone ADPs, increase from baseline in N. Rukiga.

**Treatment of Diarrhoea with ORS**: Mixed: Improvements in 6 sites( M'bagne 27%-40%) Reductions in 3 (Sherbro 88%-25%)

# Continued

**WASH:** AIM Health & WASH: promotion of WASH practices in ttC, and supporting community to address improvements in WASH infrastructure

**Access to safe water**: target attained in 3 sites, improvements in 6 sites

**Access to sufficient water**: target attained in 2 sites

**Handwashing**: Target attained in 6 sites

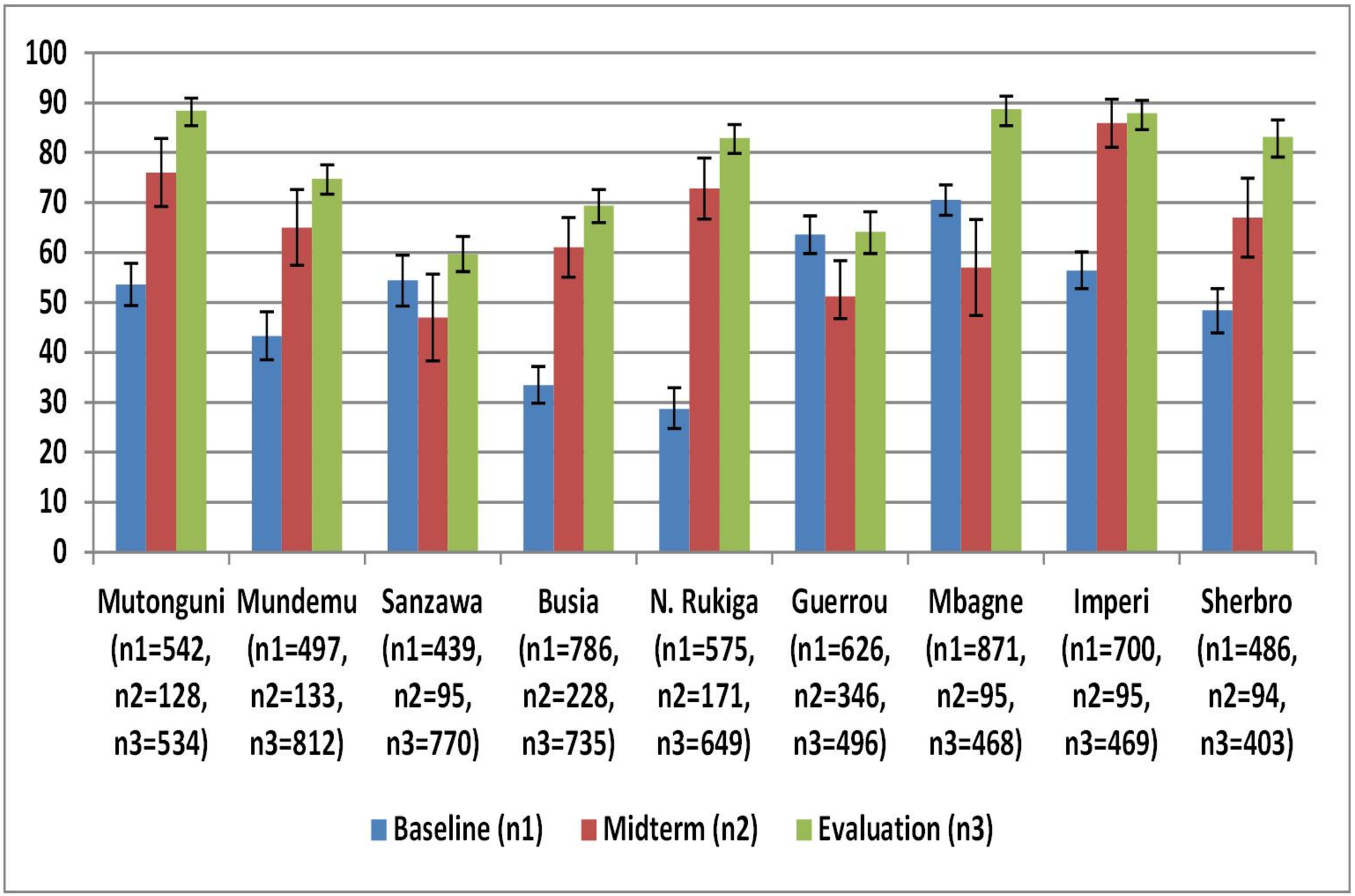
**Mothers aware of 3 modes of MTCT**: Low in most sites

# Access to Essential Services

**Skilled Birth Attendance**: High levels across all sites. **Target of 60% increase achieved in Sierra Leone, Mbagne and N.Rukiga (29%-83%)**. High rates (70%-90%) across all programme sites.

**Ante-natal Care: Target of 60% increase attained in all sites,** except Imperri (close to target).

**Post-natal Care:** More challenging- **target of 60% increase not attained in any site.** Trend across country slow decline at mid-term and increase at endline in 8 sites




Skilled attendance at birth (0-59m) Trends

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| Demand-side actions and results | Supply-side actions and results |
|---|---|
| **ttC activities at household level:** | **People-led supply advocacy (through CVA)** |
| • More mothers willing to attend ANC<br>• More mothers willing and able to start ANC early<br>• Follow-up dialogue in subsequent ttC sessions enhances compliance with ANC advice | • Improved staff numbers; attitudes; motivation<br>• CHWs participation on 'supervised' service delivery (at facilities, outreach)<br>• Increased services (outreach sites/times) |
| **COMMs activities reinforce ttC information** | **Facility-improvement actions** |
| • Accompanied ANC attendance (by spouses)<br>• Household support for mothers away to ANC (other household members; neighbours, etc.)<br>• Emergency transfer to ANC for mothers with danger signs (ambulance, motorbike, boat, horse-drawn carts, etc. | • Equipment and supplies (laboratory supplies, weighing scales, blood pressure instrument)<br>• Renovations; on-site expansion<br>• Multiplying facilities – initial actions only; too short to complete and use |

# Continued

**User Satisfaction**: Improvements in all Programme sites with improved attitudes of staff and ttC discussions on importance of attending health facilities.

**Family Planning**: Increased from midterm in four sites.

Improved availability of services in facilities and positive shift in men's attitudes on use of FP. Although slow in some countries

**Availability of Staff & Supplies**: Health Facilities indicate increase in supplies. Staff numbers increased in some sites, but inadequate in most.

*In several sites CVA groups successfully advocated to local MoH for increased staffing (Mbagne , Tanzanian and Ugandan sites)*

Birth Certs: 80% target of children (0-59m) with birth certs not attained in any ADP (improvements only in Sierra Leone sites)

| Indicator | Mutonguni | Mundemu | Sauzawa | Busia | N. Rukiga | Guerrou | Mbagpe | Imperi | Sherbro |
|---|---|---|---|---|---|---|---|---|---|
| % change in stunting | | | | | | | | | |
| % change in wasting | | | | | | | | | |
| % infants 0-5m exclusively breastfed | | | | | | | | | |
| % children 6-59m had iron-rich foods | | | | | | | | | |
| % pregnant mothers had iron-rich foods | | | | | | | | | |
| % children 6-59m had Vitamin A supplement | | | | | | | | | |
| % children 12-59m had PENTA3 immunization | | | | | | | | | |
| % decline in ARI prevalence (child 0-59m) | | | | | | | | | |
| % decline in fever prevalence (child 0-59m) | | | | | | | | | |
| % decline in diarrhoea prevalence in (child 0-59m) | | | | | | | | | |
| % increase in MTCT awareness among mothers | | | | | | | | | |
| % households with access to safe water | | | | | | | | | |
| % households with access to sufficient water | | | | | | | | | |
| % mothers that wash hands (2 of 4 key times) | | | | | | | | | |
| % increase in births assisted by skilled attendant | | | | | | | | | |
| % increase in ANC completion (≥ 4 visits) | | | | | | | | | |
| % increase in PNC attendance (3 visits) | | | | | | | | | |

# LiST Results

| AIM Health Programme Sites | Neonatal Mortality | | | Under-five Mortality | | | Maternal Mortality | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2012 | 2015 | % Change | 2012 | 2015 | % Change | 2012 | 2015 | % Change |
| Mutonguni, Kenya | 19 | 13.5 | **30.91** | 72 | 52 | **27.72** | 518 | 427 | **17.50** |
| Mundemu, Tanzania | 21 | 6 | **71.43** | 61 | 52 | **14.75** | 486 | 372 | **23.46** |
| Sanzawa, Tanzania | 21 | 11 | **47.62** | 94 | 61 | **35.11** | 486 | 393 | **19.14** |
| Busia, Uganda | 19 | 12 | **38.03** | 115 | 65 | **43.67** | 416 | 327 | **21.51** |
| North Rukiga, Uganda | 26 | 10 | **61.46** | 185 | 98 | **46.93** | 416 | 297 | **28.62** |
| Guerrou & Mbagne, Mauritania | 52 | 40 | **24.10** | 170 | 116 | **31.43** | 732 | 702 | **4.07** |
| Imperi, Sierra Leone | 23 | 17 | **23.47** | 194 | 280 | **-44.44** | 1509 | 1347 | **10.7** |
| Sherbro, Sierra Leone | 24 | 21 | **15.83** | 143 | 197 | **-37.73** | 1580 | 1524 | **3.55** |

# Key Conclusions

*"The evaluation has found compelling evidence that the AIM Health programme implementation partnership between WV, governments and communities has worked well in all programme sites to deliver sustained health interventions over the five-year programme period"*

FARST Africa, AIM Health Evaluation Report

# Key Conclusions

- **Evidence strong partnership :** WV- MoH- communities worked well to deliver sustained health interventions.
- **CHWs strengthened and empowered** for sustained behaviour change
- **Programme Goal** has been achieved in most locations
- **Coverage** : no measure of coverage of ADP.
- **Food Security key issue** underpinning programme results
- Critical interplay between **WASH indicators**, occurrence of illnesses and nutritional status
- Substantial improvements in **access to health services**, SBA, ANC – enhanced demand. PNC

# Key Recommendations

- All partners involved in AIM Health should commit to another five-year programme cycle

- WV to strengthen **quality of implementation of the ttC and CVA models**

- WV to include specific programme action to **enhance and address service-delivery constraints**

- Strenghten **linkages with WV ADP Programming** ie livelihood and food security improvement, WASH

# Key Recommendations

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- Increased targeting and support for **unwed pregnant teens**

- Expand **coverage** within existing ADPs,

- Promote involvement of **male partners**

- Address **gender based violence** as a factor hindering care seeking and the overall wellbeing of women

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# Key Learning

- **Strong partnership approach** – MoH, communities
- **Increased demand** for health services generated by the AIM Health Programme – not met by supply.
- **Food security issue** – impacting nutrition intake
- **ttC and CVA** – quality of implementation needs strengthening
- **CHW motivation** – incentive strategy is important / household coverage issue
- **Coverage** – Greater attention to breadth and depth of coverage

# Key Learning

- **Respectful care at birth** – referrals are successful where staff are kind and caring, more change required

- **Male involvement** generating positive results – early stages

- **Teenage pregnancy** rate increasing across most sites

- **Prevalence of GBV** – undermines women's confidence to seek health care

# Phase II Proposal: AIM Health Plus

- Maintain 360 degree approach: **ttC, COMM, CVA**

- **mHealth**

- **Health Facility Strengthening** [MNCH services] – Staff capacity building, equipment, referral process, supply chain assessments, BabyWASH, solar panels

- Strengthen **nutrition links** – preventative

- Strengthen **WASH** component

- More conscious focus on **gender issues** – FGM, GBV, male involvement in MNCH

- Improve **breadth and depth of coverage** – IQA, early registration

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# Challenges and Limitations

- Data Collectors little/no experience in using PDA tablets/smartphones for data collection required intense training, follow-up & guidance- slowed down pace of data collection
- Challenge recruiting RA's with adequate qualitative experience (probing skills, capture unbroken audio recordings, transcription)
- Deworming was inadvertently excluded from survey questionnaire.
- *Challenges in reaching some targeted respondents- timing of data collection process*
- In Sierra Leone data collection constrained by Ebola travel restrictions and fears: Enumerators prevented from entering 2 clusters (Sherbro) & Mothers refused taking child's height/weight to avoid body contact