

**Mama SASHA Project Western Kenya
Progress Update**

7-10th October 2013

4th SPHI Meeting, Kumasi, Ghana

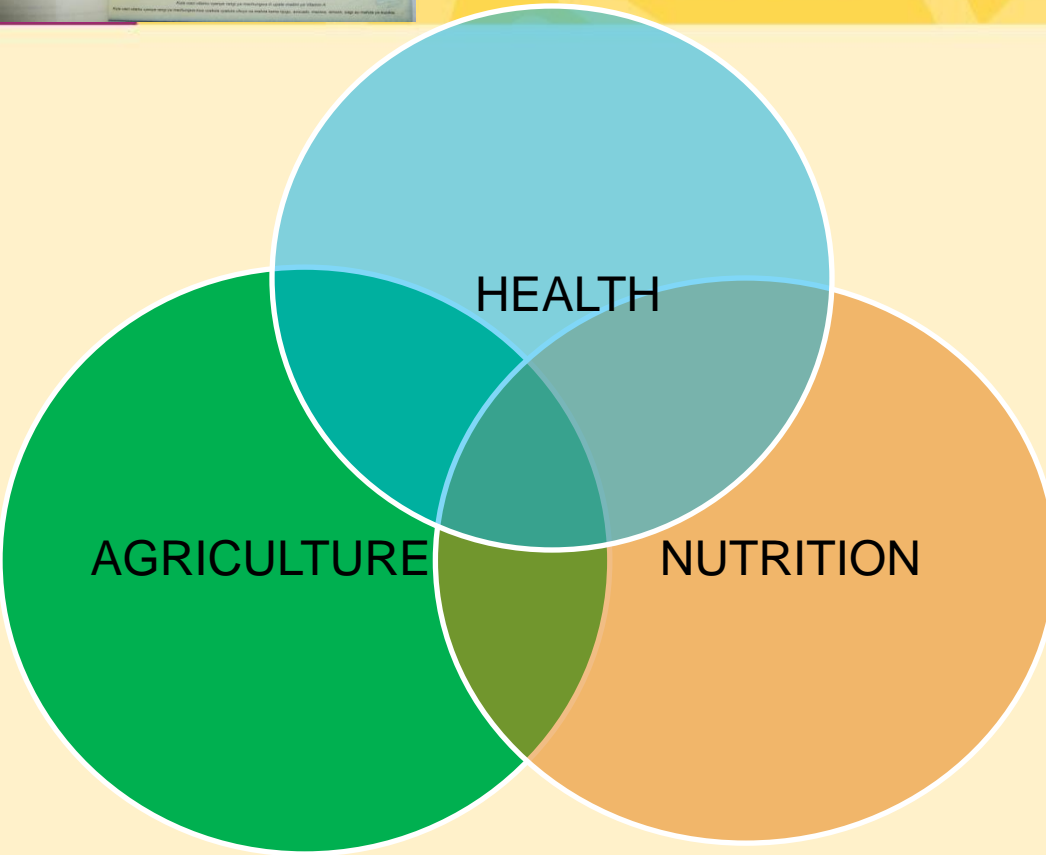
Dr. Frederick Grant



SASHA 

Sweetpotato Action for
Security and **Health** in **Africa**

Background: Introduction



Target group

- Pregnant women

Key actors

- CHW's/CHEW's
- Vine multipliers/AEO's
- ANC nurses/DNO's
- Provincial administration

Background: Goal & Objectives

Goal: To assess the cost effectiveness of integrating OFSP into an existing **health service delivery program*** to improve the health status of pregnant women and the nutritional status of children up to two years in selected districts(counties) of Western Kenya



- **Objective 1:** Strengthen the utilization of **IEC materials** at both the health facility and community levels to support OFSP production and consumption



- **Objective 2:** Improve the **evidence base** of the health impacts on infants and their mothers and the use of health services by pregnant women



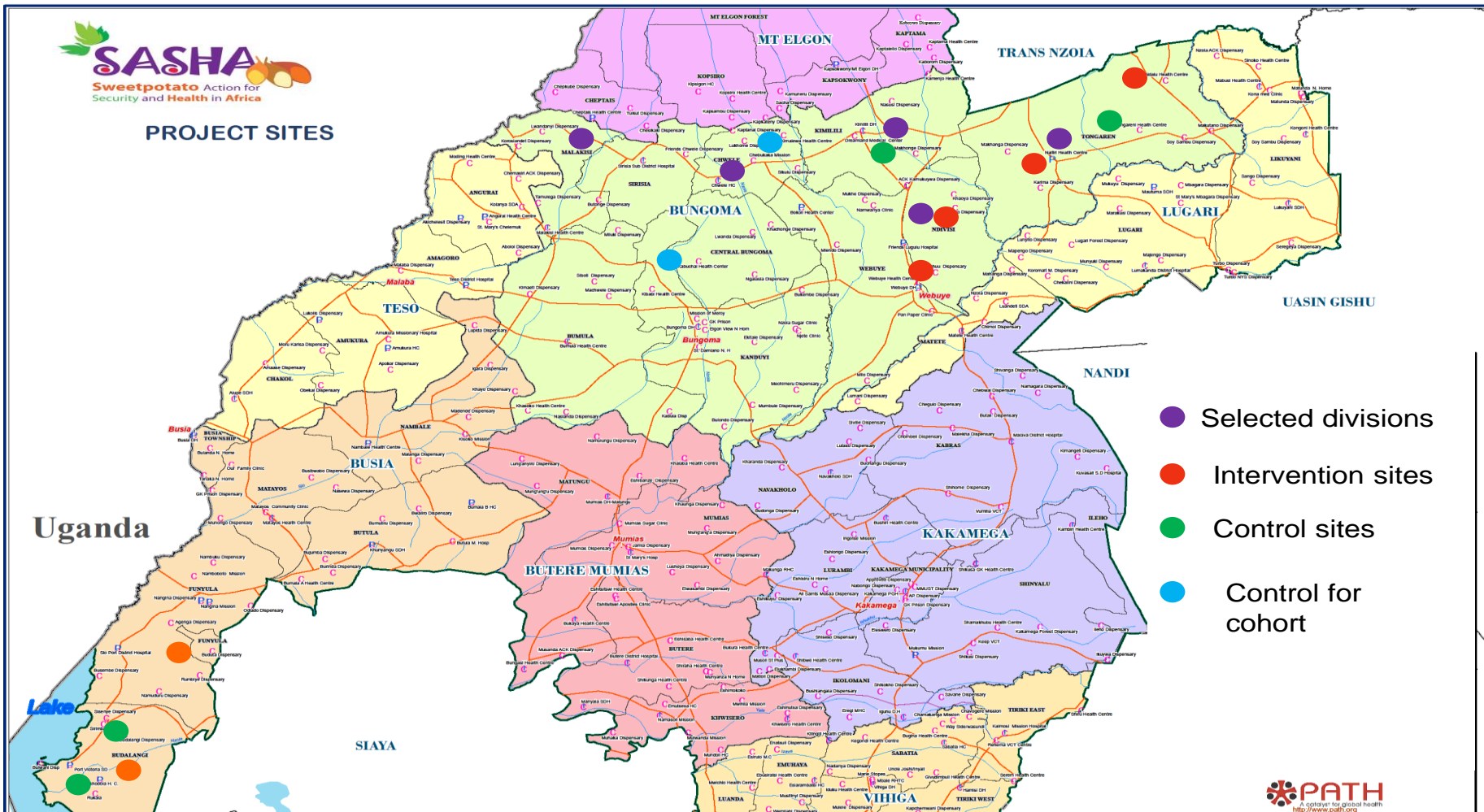
- **Objective 3:** Assess the **costs and benefits** of linking an integrated OFSP agricultural-nutritional intervention to a health service delivery system serving pregnant women

* APHIA plus

Project areas



PROJECT SITES



- Selected divisions
- Intervention sites
- Control sites
- Control for cohort

Uganda

Lake

Background: Partners

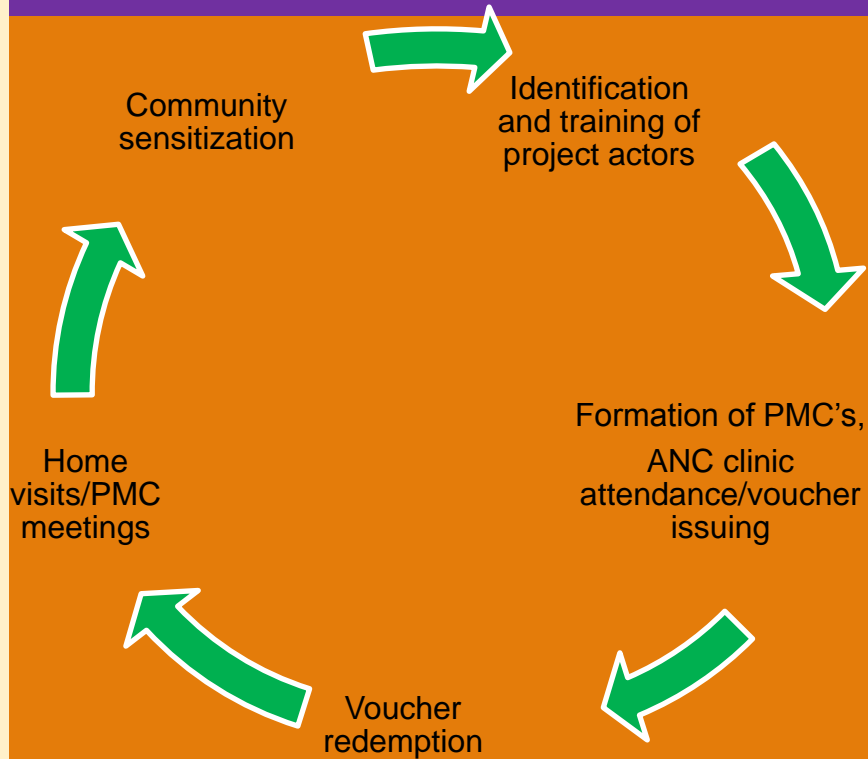


- CIP
 - PATH
 - ARDAP
 - CREADIS
 - KARI
 - Ministry of Health
 - Ministry of Agriculture
- With scientific inputs from
- Emory University
 - University of Toronto
 - University of Washington

Implementation strategy



Intervention



Control

- Trainings by APHIAplus to HCW's and CHW's

Achievements: Women reached



Since March 2011 – August 2013

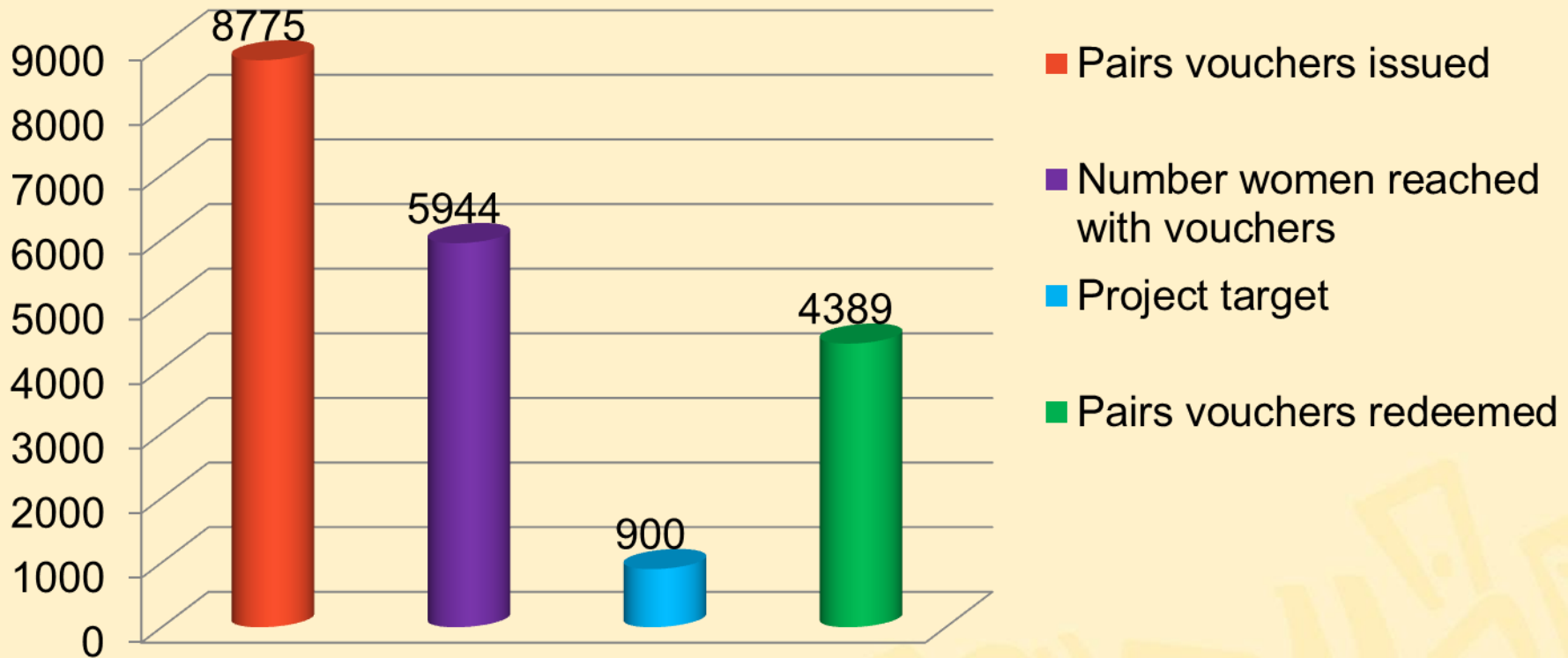
- Reached over 5900 women through
 - Voucher issues
- 215 PMC/LMC formed
 - >1400 members
 - 25,141 attendances



Achievements: Voucher issue vs redemption



March 2011-August 2013



Achievements: Program Implementation

IEC materials



- IEC materials designed and produced
 - 300 badges for program actors
 - 2000 healthy eating leaflets
 - 200 healthy eating posters



Growing Orange-fleshed Sweetpotatoes

1 Land Preparation & Selecting Healthy, Vigorous Vines to Plant

2 Planting

3 Weed, Hill-up and Avoid Weevils

4 Harvest without Damaging

HEALTHY EATING

for mothers, babies and children

Healthy Mothers

Healthy Eating

Protective Foods

Body Building Foods

Vitamin A

Keep your foods in clean and covered containers in a cool and dry place

Orange-fleshed Sweetpotatoes

Healthy Eating for mothers, babies and children



Program Implementation Achievements

Training and Coordination



- Integrated Ag-Health refresher training for implementing agents
 - Ongoing refresher trainings
 - 191 staff participated
 - Male opinion leader training
- Quarterly partners' meetings
- Monthly feedback meetings
- Quarterly review meetings with men opinion leaders



Farmer field days



- Facilitated Integration of agriculture and health during field days
- 7 field days conducted (2011 and 2012)
- Reached over 2400 people



Demo plot establishment



- Established 14 demo plots (size 320m²)
 - Impart agronomic lessons on OFSP to beneficiaries
 - Compare yields among varieties
 - Act as trial plots to assess performance of Kabode and Vita compared to local variety (Bungoma)
 - Findings presented at 9th APA meeting
 - Wamalwa and Grant, 2013.



Irrigation equipment



Partnership health check up

**SASHA**
Sweetpotato Action for
Security and Health in Africa

- Done to allow reflection on internal partnership processes, identify areas working well, and areas of concern
- Round 4 conducted and results discussed by partners
 - Reviewed the communication strategy developed in year 2 and updated in year 3

Integrated gender into project activities



Monitoring system established



- Data capture for Ag and health activities
 - Routinely (actors on the ground)
 - During monthly supervision visits (supervisors)
- Forms collection and centralization
 - During monthly supervision visits
 - During monthly feedback meetings
 - Sent monthly to the data manager / M&E Specialist
- Data entry: modules developed under CSPro
- Archiving: files for hard copies

A photograph of a data collection form titled "AG AND HEALTH TRACKING FORM INTERVIEW FROM ELIGIBLE CATCHMENT AREAS". The form is a grid with multiple columns and rows, containing handwritten data. The columns include fields for "Name", "Age", "Sex", "Education", "Occupation", "Health Status", and "Agriculture". The rows list individual interviewees with their respective details.

Improving the evidence base
– evaluating impact,
acceptability, feasibility and
affordability

Operations research (Round 2)



- Conducted to assess the feasibility, acceptability and **sustainability** of project

Dissemination of findings:

- Machira et al. IUNS/ICN2013: Granada, Spain.
 - Summary findings
 - Marked improvements in project strategy in the 2nd wave compared to the pilot
 - Male involvement is increased,
 - Training curricula have been strengthened and services are largely standardized
 - Evidence of integration of lessons learnt from the pilot into the 2nd wave of the project's implementation.

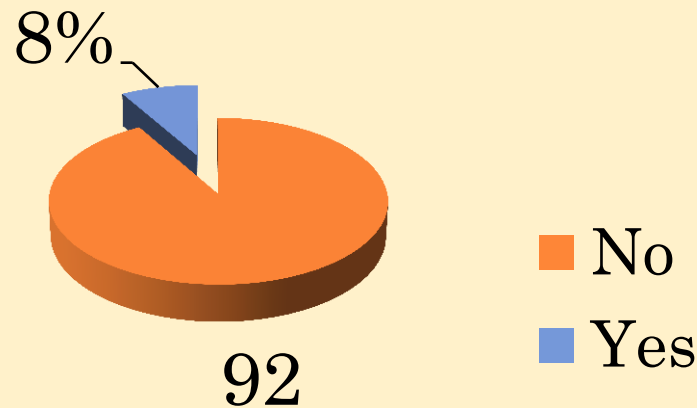


Impact evaluation-Baseline survey



Dissemination of findings

- Perumal et al. BMC Pregnancy and Childbirth 2013, 13:146
<http://www.biomedcentral.com/1471-2393/13/146>
- Grant et al. IUNS/ICN2013: Granada, Spain.



Knowledge about OFSP at the baseline is low hence to track by the end of the intervention

- The prevalence of vitamin A deficiency (VAD), among the children 6-23 months was **18.3%** & did not significantly differ by study site (Intervention: **18.4%** vs. Control: **18.2%**)

Cohort Vitamin A study (COVA)



- Prospective study: Impact of Mama SASHA on diet, food security and nutritional status of mothers and their infants
 - Supplementary funding obtained May 2012
 - Early pregnancy, late pregnancy, 4 and 9 months postpartum
 - Infection adjusted vitamin A, iron, anemia
 - Breastmilk & plasma samples from pregnant & lactating women (**not funded in original Mama SASHA component**)
 - Plasma samples from infants

Economic Evaluation



- Conduct cost analysis to estimate the economic and financial costs of resources used to implement and scale up Mama SASHA intervention.
- Two methods to estimate resource use and costs:
 - Project expense reports
 - Microcosting techniques to capture shared resources by health workers, community health workers and vine multipliers (i.e. labor, agricultural supplies)
- Estimate total incremental costs, cost per beneficiary reached and cost shares for key inputs and activities.

Cost-effectiveness



Conduct cost-effectiveness analysis using multiple outcomes:

- Reduction in Vitamin A deficiency and sequelae associated with Vitamin A disability.
- Model the contribution of Vitamin A to overall morbidity and mortality to estimate Disability life-year adjusted (DALY) averted.
- Conduct additional CE analysis using other key program outcomes that have reliable measures of effectiveness, including anemia and antenatal care utilization.

Upcoming surveys



Endline cross-sectional survey

- Nov- Dec 2013: HH enumeration and selection
- March – May 2014: Data collection
 - Computer-based interviewer administered surveys & anthropometric measurements
 - ~300 pregnant women and 2400 mother-child dyads (blood sampling in children 6-23mo).

Food consumption survey for COVA

- Dietary intakes of mothers & their infants at 9 mo postpartum
- Nov 2013 – April 2014.
 - ~250 mother-child (8-9mo) dyads

Lessons learned



- Refresher trainings important for strengthening coordination, implementation and retention of IEC messages by all actors
- Difficult to motivate individualized counseling
 - Group nutritional counseling more common as compared to individual counseling in spite of training & revision of counseling cards
- Continuous monitoring of control sites to avoid contamination
- Increased number of pregnant women who are accessing our facilities but are ineligible for voucher issuance since they originate from villages that do not fall within our clientele.

Lessons learned



- There is the need to motivate CHWs, through refresher trainings, increased remuneration or provision of T-shirts, since they are an essential component for the success of any project of such magnitude.
- Male involvement in Mama SASHA is important in increasing the uptake of the intervention by the project's target participants (pregnant and lactating women).
 - This is because access to land for planting the OFSP vines and decision to visit the ANC/PNC clinics are mostly possible with the concurrence of the male partner.

Challenges



- Low voucher redemption early part the years due to prolonged dry spell.
- Increased labor costs for vine multipliers (maintenance of plots during dry spell)
- Increased work load for the project actors (ANC and Vine multipliers)

Thank
you !!

