

Does the Girinka Program Improve the Nutrition of Young Children and Can the Impact Be Increased Through Social Behavior Change Communication?

Valerie Flax (RTI International), Emily Ouma (ILRI), Mary-Ann Schreiner (Three Stones International), Lambert Izerimana (University of Rwanda), Eugene Niyonzima (University of Rwanda)

Study Design

This cluster-randomized controlled cohort study is designed to measure the impacts of participation in (I) the Girinka program plus a community-based animal source food (ASF) social behavior change communication (SBCC) intervention compared to participation in Girinka alone and (2) Girinka alone compared to Girinka eligibility, but no participation. Main outcomes of interest are height-for-age z-score, stunting, minimum dietary diversity, and milk consumption among children I-3 ½ years.

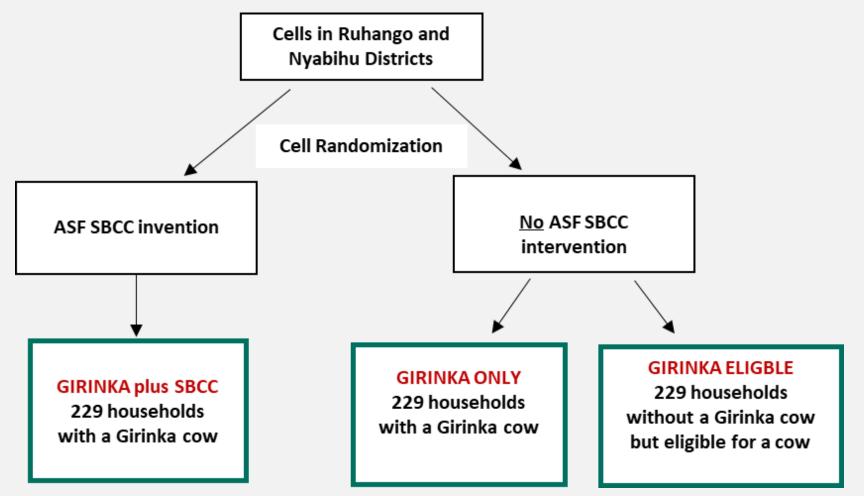
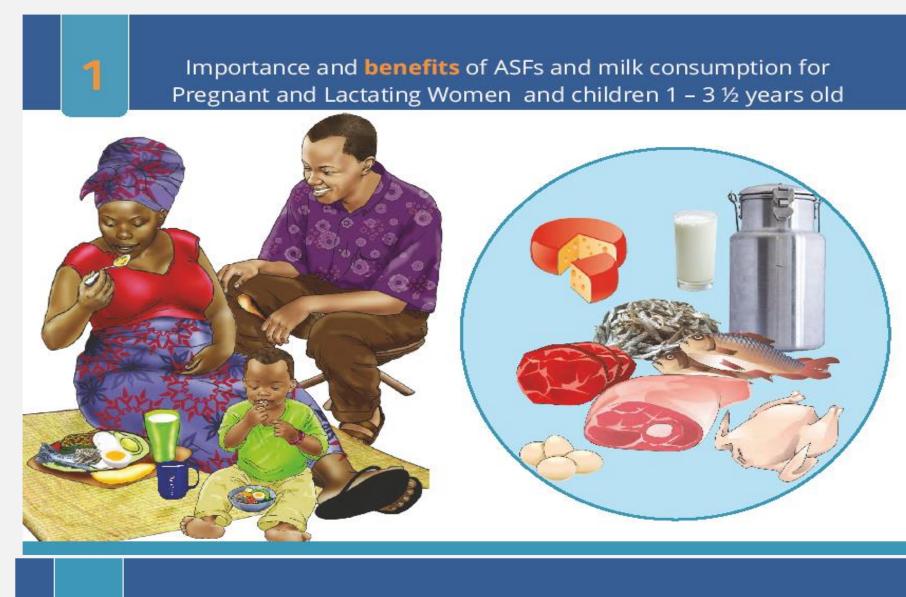


Figure I. Evaluation Design

ASF SBCC Intervention Design - Gabura Amata Mubyeyi

- Utilized formative research to develop contextualized SBCC materials, including 5 counseling cards, brochures, and a poster, and a CHW training curriculum
- Drew on expertise from Rwandan nutrition specialists, SBCC design experts and Graphic Artists
- Gained approval of materials and collaboration for implementation from RBC and NECDP



Importance and benefits of ASFs and milk consumption for Pregnant and Lactating Women and children 1 – 3 ½ years old

• Drinking at least one cup of cow's milk and eating a variety of foods during lactation and pregnancy helps to meet the protein

- foods during lactation and pregnancy helps to meet the protein and micronutrient needs for mom and baby.

 Pregnant and lactating women and children 6 months and older need to eat at least one type of animal source food daily, such as fish, eggs or meat to meet their daily nutrient requirements.

 Milk is rich in calcium needed for bone formation and has fat and
- fish, eggs or meat to meet their daily nutrient requirements.
 Milk is rich in calcium needed for bone formation and has fat and proteins needed for children to grow well.
 Cow's milk is a good source of calcium and important during pregnancy because they help your unborn baby's developing
- ASFs provide multiple micronutrients simultaneously. For example, foods such as liver contain iron and vitamin A.

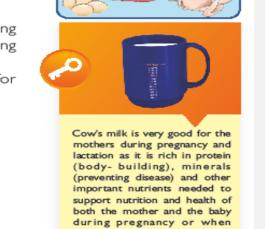


Figure 2. Sample Counseling Card (front and back)

Gabura Amata Mubyeyi ("Parents give milk") Training

 A Cascade Model implemented to provide training to trainers and delivered in three levels. Trainers are CHW supervisors from Health Centers; CHWs are the 4th newly-elected CHW at village

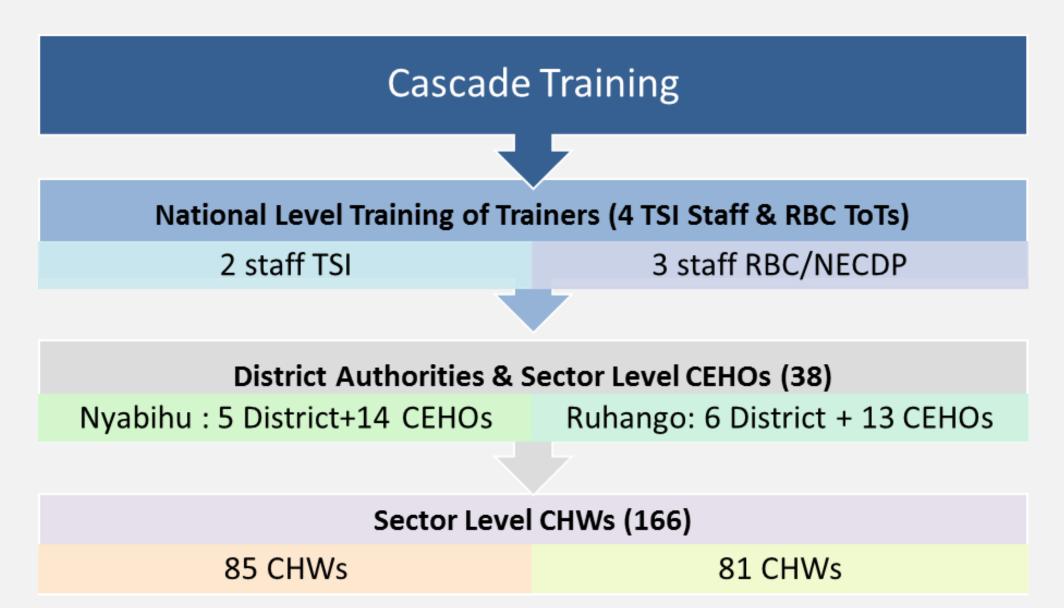


Figure 3. Gabura Amata Mubyeyi Training Strategy

Monthly Supportive Supervision

Three Stones Field Coordinators provide the following support:

- Monthly check- in sessions with Sector CEHOs
- Observe monthly household visits with selected CHWs
- Observe monthly community activities
- Facilitate peer- learning events in each District
- Facilitate supervision and lesson- learning events in each District

CEHOs on a monthly basis:

- Support village CHWs with any training updates required
- Observe at least 3 activities per Cell per month
- Reporting attendance, supervision observations and feedback on a monthly basis

Gabura Amata Mubyeyi Implementation

CHWs on a monthly basis:

 Conduct at least 2 Gabura Amata Mubyeyi activities in their village during Household visits, Cooperative meetings, Parents Evenings, Growth Monitoring and Promotion, or Community Dialogue.

Implementation Progress from January – July 2019

Target households reached:

- II4 in Ruhango district
- 120 in Nyabihu district

Community members reached:

Total women

Ruhango: 8207; Nyabihu: 8171

Women with children < 2YRS
Ruhango: 2541; Nyabihu: 2931

Total men

Ruhango: 3210; Nyabihu: 3550

Baseline Household Survey Results

Height-for-age and weight-for-age z-scores were higher and stunting prevalence was lower in households with a Girinka cow compared to those who were eligible for Girinka, but that had not yet received a cow

Table I. Child Anthropometry in Girinka Only Versus Girinka Eligible Households

| Child Anthropometry | Girinka only (N=228) | Girinka eligible (N=224) |
|------------------------------|----------------------------|--------------------------------|
| Height-for-age z-score (HAZ) | -1.61 | -2.04*** |
| Weight-for-age z-score (WAZ) | -0.62 | -0.91*** |
| Stunting (HAZ<-2 SD) | 37.7% | 47.8%* |

*p<0.05, ***p<0.001

- Based on 24-hour recall, minimum dietary diversity (44% both), ASF consumption (48% vs. 44%), and milk consumption (7% vs. 5%) did not differ significantly among Girinka only vs. Girinka eligible children
- Milk powder in Shisha kibondo accounts for the majority of ASF consumption among children, followed by fish and then fresh milk
- Based on 7-day recall, a greater percentage of Girinka only (43%) vs.
 Girinka eligible (23%) children consumed fresh milk
- 44% of Girinka only and 50% of Girinka eligible mothers were aware of the importance of giving ASFs to young children
- About 85% of Girinka only households boil their milk, but 93% store it in a plastic container at room temperature
- Fewer Girinka only than Girinka eligible households had severe food insecurity (63% vs. 70%)

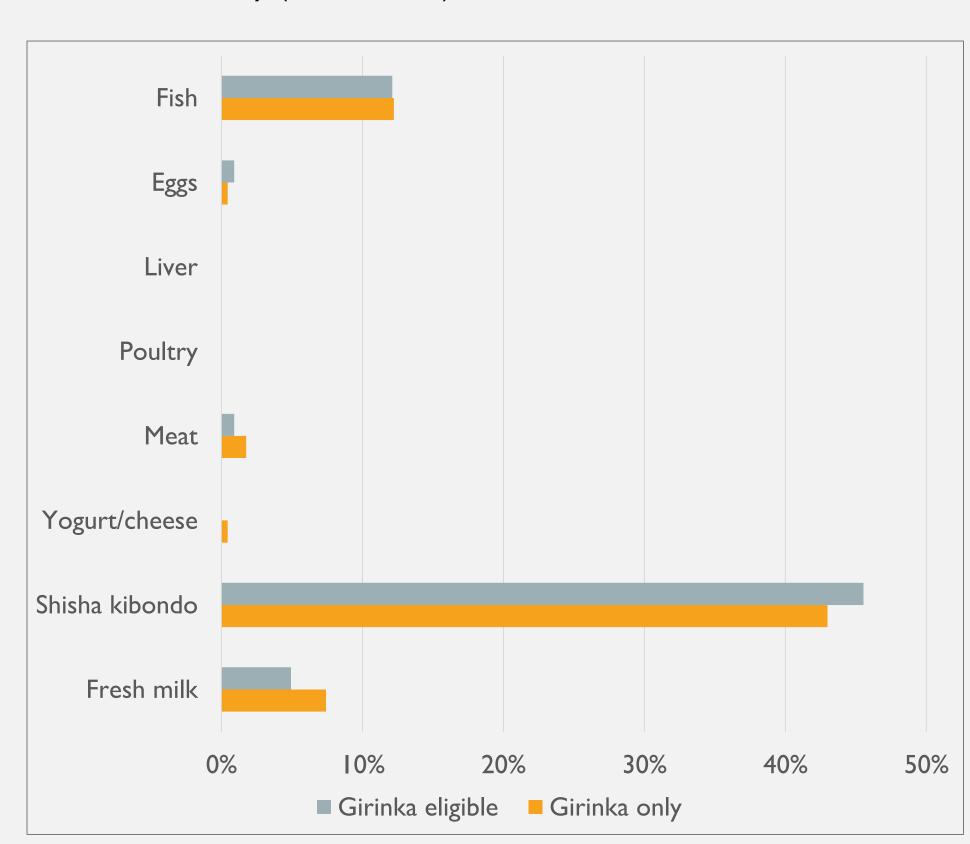


Figure 4. Types of ASFs consumed by children in the last 24 hours

Implications

- Promotion of programs that enhance access of poor households to ASFs, such as Girinka is necessary. Results of this study and others have shown associations between ownership of a cow and reduction in stunting in children.
- Sustainable business models to improve access to other ASFs like fish, in addition to dried and fresh milk.
- Results show lack of knowledge by mothers on the importance of ASFs for child growth and appropriate timing of introduction of ASFs. There is therefore need for investment in SBCC efforts at scale to enhance nutrition gains that can be achieved through ownership of a livestock asset such as a cow.
- "Gabura Amata Mubyeyi" is well accepted by communities and could be scaled to include other ASFs and implemented in other geographical areas.





For more information, please contact Emily Ouma on e.a.ouma@cgiar.org

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f adults in the household

ASFs and cow's milk due

to religious or cultural

beliefs, the benefits and

importance of cow's milk

consumption for PLW and

young children should be

encouraged and

supported by community









