

Catholic Relief Services Rwanda

GIKURIRO SBCC Innovations

FINAL REPORT



Prepared by:



A Spark for Change —



TABLE OF CONTENTS

| ABBREVIATIONS AND DEFINITIONS | 4 |
|---|--------|
| INTRODUCTION | 5 |
| BACKGROUND | 5 |
| Partners and Stakeholders | 6 |
| Objectives | 7 |
| Research Framework | 7 |
| Literature Review | 8 |
| METHODOLOGY | 8 |
| Pilot Design and Data Collection Tools | 8 |
| Sampling Strategy | 9 |
| Data Analysis | 10 |
| Data Collection through an Action Research Cycle | 10 |
| Nudge Innovation Selection & Development | 11 |
| FINDINGS OBJECTIVE 1 | 15 |
| Objective 1: Demographics and Complementary Feeding Knowledge | 15 |
| Feeding Chart | 15 |
| Baby Clock | 17 |
| Objective 1: Appropriateness, Acceptability and Feasibility | 18 |
| Appropriateness and Acceptability | 18 |
| Feasibility | 22 |
| Male Engagement and Couple Communication | 23 |
| FINDINGS OBJECTIVE 2 | 25 |
| Objective 2: Unique SBCC for Compound Hygiene and Complementary Feeding | 25 |
| Objective 2: Demographics | 25 |
| Objective 2: Acceptability, Appropriateness and Feasibility | 25 |
| CHALLENGES AND LESSONS LEARNED | 28 |
| CONCLUSIONS | 28 |
| RECOMMENDATIONS | 28 |
| REFERENCES | 29 |
| ANNEXES | i |
| Annex 1: Data Collection Tools | i |
| Annex 2: Call for Concepts | xxviii |
| Annex 3: Developed Materials Specifications | xxx |
| Annex 4: Process for Procurement and Assembly for Nudge Prototypes | xxxi |



| Figures | |
|--|--------------|
| Figure 1: The Social Economic Model | 6 |
| Figure 2: TSI Action Research Cycle | 10 |
| T ables | |
| Tables | |
| Table 1: Partners and Stakeholders | 6 |
| Table 2: Research Framework | 8 |
| Table 3: Nudge Innovation Sampling Frame | 10 |
| Table 4: Innovation Evaluation Criteria | |
| Table 5: 2 Selected Nudge Prototypes for Pilot Error! Bookmark | not defined. |
| Table 6: Presence of Kitchen Garden by District for recipients of Feeding Chart | 16 |
| Table 7: Feeding Chart mothers 24- hour recall of foods fed to child 6 – 24 months | 16 |
| Table 8: Presence of kitchen garden by district for recipients of Baby Clock | 17 |
| Table 9: Baby Clock mothers 24-hour recall of food fed to child 6 - 24 months | 18 |
| Table 10: Feeding Chart Observation Checklist | 19 |
| Table 11: Baby Clock Observation Checklist | 21 |
| | |



ABBREVIATIONS AND DEFINITIONS

CBEHPP Community- Based Environmental Health Promotion Program

CBF&NP Community- Based Food & Nutrition Policy

CRS Catholic Relief Services

CU2 Children Under 2

FNWTWG Food, Nutrition and WASH Technical Working Group

GoR Government of Rwanda

HH Households

HPTWG Health Promotion Technical Working Group

IYCF Infant and Young Child Feeding

MAD Minimum Acceptable Diet
MDD Minimum Diet Diversity

MMF Minimum Meal Frequency

MIYCN Maternal, Infant and Young Child Nutrition
SBCC Social and Behavior Change Communication
SILC Savings and Internal Lending Communities

TSI Three Stones International

UNICEF United Nations Children's Fund WASH Water, Sanitation and Hygiene

WHO World Health Organization

Minimum Acceptable Diet (WHO IYCF practice indicator): the proportion of children aged 6 – 23 months who receive a minimum acceptable diet (apart from breastmilk). MAD is a composite indicator from two fractions: breastfed children 6 – 23 months of age who had at least the minimum dietary diversity and minimum meal frequency during the previous day; and non-breastfed children 6 – 23 months of age who received at least two milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day (1,2).

Minimum Diet Diversity (WHO IYCF practice indicator): the proportion of children 6 – 23 months who receive foods from four or more food groups per day. The calculation of this indicator is based on seven food groups recommended for children aged 6 – 23 months by WHO(2).

Minimum Meal Frequency (WHO IYCF practice indicator): the proportion of breastfed and non-breastfed children 6 – 23 months who receive solid, semi- soft or soft foods (including milk feeds for non- breastfed children) the minimum number of times or more the previous day. The minimum is defined as: two times for breastfed children aged 6 – 8 months, three times for breastfed children aged 9 – 23 months and four times or more for non- breastfed children aged 6 – 23 months.

Parents Lumieres: Gikuriro program trained model parents

Stunting: a height deficit in children in relation to age, measured using height- for- age (HFA or HAZ); also known as chronic malnutrition(3).



INTRODUCTION

In 2015, Catholic Relief Services Rwanda (CRS) was awarded a five-year USAID project, the Integrated Nutrition and WASH Activity, "INWA" in partnership with the Netherlands Development Organization, SNV. INWA was renamed in Kinyarwanda the "GIKURIRO Program", meaning good growth as opposed to stunting. The *Gikuriro* program focuses on behavior change, capacity building and nutrition, water, sanitation and hygiene (WASH) service delivery. The program is implemented through a consortium of two international agencies: Catholic Relief Services (CRS) who is the prime and SNV, the Netherlands Development Organization as sub-recipient. The *Gikuriro* program works through decentralized Government of Rwanda (GoR) systems and structures and is aligned with USAID's Multi-Sectoral Nutrition Strategy to improve nutrition to save lives, build resilience, increase economic productivity, and advance development.

Gikuriro aims to improve the nutrition status of women of reproductive age and children under five, with an emphasis on the 1,000-day window of opportunity from pregnancy until a child's second birthday. *Gikuriro* focuses on capacity building of relevant district government structures and implementing partners, while also supporting implementation of the GoR's Community-based Food and Nutrition Policy (CBF&NP) and Community-Based Environmental Health Promotion Program (CBEHPP) in eight districts in Rwanda. Through this program, a social and behavior change communication (SBCC) strategy has been developed to improve nutrition and WASH practices, targeting women of reproductive age and children under five.

BACKGROUND

Comprehensive coverage of the current *Gikuriro* programming has shown incredible progress in reaching targeted beneficiaries and improving nutrition outcomes for women of reproductive age and children under-five. Results of the Gikuriro 2018 mid-term evaluation measuring program impact on nutrition and WASH indicators for children under five, detailed positive results with increase in household kitchen gardens among *Gikuriro* beneficiaries of 12.4%, with green vegetables being the most commonly grown. This has led to a significant proportion of beneficiary households consuming the minimal acceptable diet, an increase from 22% to 45.5%. An increase in nutrition knowledge in mothers, specifically in regards to when to start complementary feeding (at 6 months) rose from 80.3% to 85.39%. Although increase in knowledge is documented, optimal IYCF practices remain low. In children aged 6 – 23 months, 29.1% achieved the minimum diet diversity, 30.8% achieved the minimum meal frequency and 22.7% met the requirements for a minimum acceptable diet.

Gikuriro's barrier analysis (2018) showed that while beneficiary knowledge has increased, there remains a lag in uptake of dietary practices that parents believe are optimal for their children. Lack of finances and insufficient access to and availability of diverse diets within the home prevents mothers from feeding their children diverse diets. Knowledge and perception gaps remain for mothers of children 9 – 23 months in regards to feeding children a minimum of three cooked meals per day.

The results of the *Gikuriro* gender analysis (2016) noted that within communities, men's role in meeting household nutritional needs remains limited to financial contribution. Decision- making and allocation of household resources are predominantly male driven, even while women's knowledge of optimal nutrition and WASH behaviors have increased. It is evident that knowledge alone is not sufficient to motivate change in behavior making it essential to identify solutions and innovations to address the gaps recognized through *Gikuriro's* gender and barrier analysis. Innovations including fathers, men and boys for improved MIYCN are proven interventions with positive effect on MMF and MMD in developing countries (4–6).

This review of findings from *Gikuriro* assessments highlighted the importance of identifying, developing and testing innovative approaches for improved programming and utilizing these approaches to contribute to sustainability and future scale-up. Through discussions with *Gikuriro*

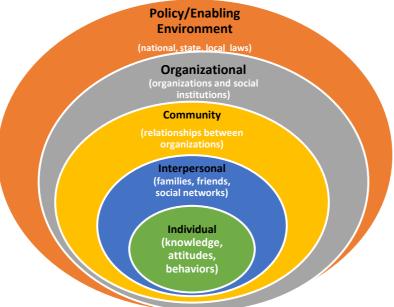


program managers, it was agreed that an innovative "Nudge Theory" SBCC strategy would be utilized for improved nutrition and CF practices. "Nudges" have the potential to enhance the effectiveness of nutrition education approaches and complement SBCC efforts (7,8).

"Nudge Theory" refers to psychologically informed tools designed to promote behavioral change for improved health and well-being (9). Nudges can be described as default choices or reminders; simple changes that make one choice more likely than another(10). Along with changes in individual habits, nudges have been utilized to influence and change behavior within communities and populations.

Guided by the Rwanda National SBCC Strategy for Integrated Early, Childhood Development, Nutrition and WASH Strategy(11), a socio- ecological model (SEM) was applied during innovation and message development with the understanding that behavior- change messages targeting individuals needs to be combined with an enabling environment addressing social norms and practices. The assumption that positioning innovations within households and with individuals, utilizing a socio- ecological model, could help to drive parental aspirations, and in turn their willingness to adapt priority behaviors to address child malnutrition and stunting(12).

Figure 1: The Social Economic Model



Adapted from: Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American Psychologist, 32(7), 513-531.

Partners and Stakeholders

To ensure alignment with National policies and secure appropriate advocacy and approvals necessary for development and implementation of SBCC innovations, a collaborative and consultative approach was employed with the following partners and stakeholders:

Table 1: Partners and Stakeholders

| Stakeholder/ Partner | Roles and Responsibilities |
|---------------------------------------|--|
| Catholic Relief Services/ Gikuriro | Provided oversight and guidance throughout all phases of innovation development and piloting, approved deliverables, ensured quality and |
| Program | will consider uptake of lessons learned into the <i>Gikuriro</i> program |
| G | activities |
| Gikuriro SBCC | Joint committee identified upon commencement of the SBCC |
| Innovations Selection | Innovations development to guide the development and pilot. This |
| Committee | |



| | committee was made up of focal persons from: <i>Gikuriro</i> program, USAID Rwanda, NECDP and RHCC. |
|---|--|
| U.S. Agency for International Development- Rwanda Mission (USAID) | The USAID Rwanda Mission supported the development of innovations for the <i>Gikuriro</i> program, provided input and guidance as member of the Selection Committee and facilitated linkages to appropriate Government of Rwanda ministries and technical working groups. |
| National Early Childhood Development Program (NECDP) | Gikuriro program is implemented under the guidance of the NECDP. In order ensure alignment with the National Integrated SBCC Strategy and policies regarding MIYCN, NECDP appointed a focal person to sit on the Selection Committee for review and input throughout the development of innovations. NECDP also provided introduction to the technical working groups in order to access expertise in MIYCN in Rwanda for design workshops and validation processes. |
| Rwanda Health Communication Center (RHCC) | As the communication arm of the health sector in Rwanda, RHCC Health Promotion Unit is responsible for the coordination of health promotion interventions. In order to ensure the SBCC innovation met the standards and needs of health promotion interventions in Rwanda, RHCC appointed a focal person to sit on the Selection Committee for input and guidance throughout the development and piloting of the SBCC innovations. |
| Three Stones International Rwanda (TSI) | In collaboration with the <i>Gikuriro</i> team, Three Stones was responsible for the design, coordination and implementation of this assignment from inception to final reporting. |

Objectives

The overall agreed upon objectives were to identify and test innovative nutrition nudges and unique SBCC messages that are acceptable, appropriate and feasible for *Gikuriro* to scale up to improve complementary feeding and compound hygiene practices. Specifically:

Objective 1: Identify, Develop and Pilot Nudges for improved Complementary Feeding practices for children under 2

- 1. Identify contextually effective nudges to promote improved CF practices, specifically MAD (MMF + MDD), and nutrition outcomes for CU2 among selected households of *Gikuriro* beneficiaries
- 2. Develop and produce relevant and unique SBCC materials based on the identified nudges to promote effective nutrition practices for improved CF for CU2
- 3. Pilot selected nudge prototypes most likely to effectively scale for improved CF for CU2 among selected households of *Gikuriro* beneficiaries through an Acceptability, Appropriateness and Feasibility framework

Objective 2: Identify, Develop and Test unique SBCC messages and materials for improved Complementary Feeding and Compound Hygiene practices for National Level inclusion

- 1. Develop two unique SBCC messages and materials for improved CF for CU2, including animal source foods (ASF) promotion and gender dynamics
- 2. Develop a unique SBCC message and appropriate material for breaking the cycle of contact/ contamination by animal waste at household level
- 3. Test images and messages among selected households of *Gikuriro* beneficiaries for refinement and validation at National level

Research Framework

Based on qualitative research assessing user experience for healthcare services and products, the following research framework was used to test nudge prototypes and unique messages and materials in order to identify the most appropriate, acceptable and feasible solutions for the target audience(13–16):



Table 2: Research Framework

| Determinant | Definition |
|-----------------|--|
| Acceptability | Whether beneficiaries assess the messages, images or materials to be likeable, agreeable or satisfactory and address their needs. |
| Appropriateness | The perceived fit, relevance or compatibility of messages, images or materials for the beneficiaries in rural or urban settings; and/ or perceived fit of the messages, images or materials to promote optimal complementary feeding and compound hygiene practices. |
| Feasibility | Extent to which the images, messages and materials are perceived to be easily understood, are targeting the most appropriate audience, and are delivered by the most accessible channel within the given setting. |

Literature Review

CRS *Gikuriro* program documents, peer- reviewed literature and relevant websites were reviewed to compile existing data and evidence on barriers and facilitators of complementary feeding related behaviors for CU2. This review focused on identifying global best practices, innovations to scale for SBCC and high-impact MIYCN practices. The results of the review informed the selection criteria for nudge prototypes, identified initial ideas to inform prototype selection, and identified entry points, behaviors to promote and modes of delivery for unique messaging and materials. The documents reviewed include:

| Author/ Organization/ Year | Literature | | |
|----------------------------------|---|--|--|
| Catholic Relief Services | Gikuriro Barrier Analysis, Gender Analysis, Midterm Review, mHealth | | |
| Rwanda, 2018 | Pilot and Annual and Quarterly activity reports | | |
| National Early Childhood | National Integrated SBCC Early Childhood Development, Nutrition | | |
| Development Program | and WASH Strategy | | |
| Rwanda, 2019 | | | |
| S. Lamstein <i>et al.</i> 2014 | "Evidence of Effective Approaches to Social and Behavior Change | | |
| 3. Lanistein <i>et al</i> . 2014 | Communication for Prevention and Reducing Stunting". | | |
| T. Sanghvi, R. Seidel, J. | "Using behavior change approaches to improve complementary | | |
| Baker, <i>et al</i> . 2017 | feeding practices". | | |
| | "Exposure to large- scale social and behavior change | | |
| S. Kim <i>et al</i> . 2016 | communication interventions is associated with improvements in | | |
| | infant and young child feeding practices in Ethiopia". | | |
| G. Pelto <i>et al.</i> 2016 | "Perspectives and reflections on the practice of behavior change | | |
| G. Fello <i>et al</i> . 2010 | communication for infant and young child feeding". | | |
| P. Dupas. 2011 | "Healthy Behavior in Developing Countries". | | |

Review of relevant *Gikuriro* program documents and the National SBCC Strategy for Integrated ECD, Nutrition and WASH (2018-2024) highlighted key entry points for innovations, behaviors to promote and unique messages of including fathers and promoting couple communication. Through examination of peer- reviewed journals it was possible to identify innovations which appropriately include fathers, men and boys for improved MIYCN and positive impacts on MMF and MMD in developing countries(4–6).

METHODOLOGY

Pilot Design and Data Collection Tools

A mixed- methods approached was utilized to collect data through the four phases of innovative SBCC development and design. In close collaboration with CRS, nudge theories for improved nutrition, specifically CF for children under two, along with development of authentic messages for



improved meal frequency, diet diversity and compound hygiene, were identified through stages of qualitative data collection employing a systematic approach. This approach included a literature review and identified data collection points. Preliminary focus groups discussions were conducted to gain community input to inform innovation design. Following delivery of innovation to households, further data collection was conducted to determine acceptability, appropriateness and feasibility through household surveys, focus group discussions, observations, self- report assessments and Selection Committee workshops¹.

Tool development was guided by the research framework and literature review. The tools were pre-tested and reviewed by appropriate stakeholders to ensure they were comprehensive, appropriate and sensitive to gender and vulnerable populations included in our sample. Interview guides and surveys were translated into Kinyarwanda. The following provides rationale for the tools and how they were utilized.

- <u>Preliminary Focus Group Discussion Guide</u>: To gain insights from *Gikuriro* beneficiary parents of children under two on complementary feeding and compound hygiene practices in order to guide the development of nudge prototypes and messages. Through FGDs, *Gikuriro* beneficiaries had the opportunity to express their desires and opinions for what is needed to remember and adopt positive MIYCN and hygiene practices.
- <u>Household Survey</u>: Household surveys were conducted to collect descriptive data of respondents along with complementary feeding knowledge and practices. This tool was designed to allow the *Gikuriro* program to utilize information gained for future comparison through midterm and endline evaluations.
- Nudge Innovation Focus Group Discussion Guide: To gain insights from parents of children
 under two regarding the acceptability, appropriateness and feasibility of the nudge
 prototype they received.
- <u>Nudge Innovation Observation Checklist</u>: To observe parents and caregivers using the innovation within their household to assess acceptability, appropriateness and feasibility.
- <u>Nudge Innovation Self- Report Assessment</u>: 5- point Likert Scale for participant views on acceptability, appropriateness and feasibility of innovative nudge.
- Unique messages Focus Group Discussion Guide: to gain perspectives and insights regarding acceptability, appropriateness and feasibility of unique messages and images, focus group discussions were conducted with parents and caregivers of children 6 24 months of age. This FGD guide focused on identifying the most appropriate and acceptable messages, images, channels of communication, materials and audience to target, through perspectives of the community. FGDs were conducted in one urban and one rural site with both female and male participants.

Sampling Strategy

Two districts were purposively selected based on characteristics of *Gikuriro* program with one rural and one peri- urban location. Within each district two sectors were selected to identify households to pilot the innovative nudge prototypes. Households and FGDs participants were purposively selected based on specific characteristics necessary for testing nudge prototypes and messages. The target population consisted of households with mothers of children under 2 for household surveys; and mothers, fathers and caregivers of children under two for FGDs. Fifty households per site were selected from *Gikuriro* beneficiary lists in the selected sites with the assistance of local implementing partners Caritas, Duhamic, and Parent Lumieres trained through the *Gikuriro* program.

Households were selected based on the following criteria:

- Households with mothers of children 6 24 months of age
- Gikuriro beneficiaries
- Members of the Village Nutrition School groups to capture participants with some knowledge of optimal complementary feeding and hygiene practices

-

¹ All tools can be found in Annex 1



Table 3: Nudge Innovation Sampling Frame

| Province | District | Sector | Setting | Innovation | # HH Surveys | # FGD Partic |) ipants |
|----------|----------|---------|-------------|---------------|-----------------|-----------------|-------------|
| | | | | | | F | М |
| Kigali | Kicukiro | Masaka | Peri- urban | Feeding Chart | 30 | 27 | 8 |
| | Kicukiro | Kanombe | Peri- urban | Baby Clock | 20 | 20 | 11 |
| Western | Nyabihu | Rambura | Rural | Feeding Chart | 20 | 20 | 15 |
| Province | Nyabihu | Rugera | Rural | Baby Clock | 30 | 21 | 12 |
| | • | | | Total Sample | 100 | 88 | 46 |

Data Analysis

FGDs transcripts were cleaned, transcribed and translated into English. Deductive analysis defined by the research framework was utilized to identify and tabulate themes and allow for cross-comparison and analysis of themes, response frequency and attributes. Themes arising outside of the research framework of "Male Engagement" and "Couple Communication" were annotated frequently and reported as cross-cutting themes. Household survey data was extracted into Excel for descriptive analysis and to serve as a baseline if determined that the innovative nudges are to be scaled up.

Data Collection through an Action Research Cycle

Three Stones utilized its Action Research Cycle approach for piloting for the development and implementation of nudge prototypes and unique messages for pre- testing and pilot. An iterative cycle was followed during the development and implementation phases, bringing relevant feedback into the development process to further refine the end products.

Figure 2: TSI Action Research Cycle

Three Stones International - Action Research Cycle Develop and pre-Refine, images, test innovations messages and innovations Train end-Present feedback for users validation Implementation Final report, lessons Collect data from learned and field recommendations Based on refined Based on literature Based on community innovations review and and expert feedback formative research from pre-test



Guided by the desk review determining key entry points and behaviors to target, identifying the appropriate innovations to pilot and test, along with material design and refinement, the intervention flowed through the following phases and waves of data collection:

Phase I: Design

- Preliminary focus group discussions (FGDs) to guide concept criteria and nudge prototype selection with targeted *Gikuriro* beneficiaries
- Identify five innovative nutrition nudges through an open competition and selection process
- Develop and refine five prototypes for pre-testing
- Purposively select 100 households to receive the innovative nudge prototypes
- Hold four FGDs with comparable respondents to target audience to pre-test five initial nudge prototypes
- Facilitate Selection Committee design workshop to present community feedback, refine and approve final two prototypes to pilot
- Build two prototypes for piloting

Phase II: Refinement

- Based on community and selection committee feedback, further revise nudge prototypes for final approval
- Pre- test unique images and messages through FGDs to identify the most appropriate and acceptable messages, images, channels of communication, materials and audience to target, through perspectives of the community
- Based on community and selection committee feedback, further revise unique images, messages and materials to promote optimal complementary feeding and compound hygiene practices

Phase III: Pilot

- Conduct quantitative surveys of identified households to receive innovative nudge prototypes
- Deliver prototypes and train households and village Parent Lumieres

Phase IV: Continuous monitoring

- Follow up with three waves of data collection for selected households using the innovative nudges:
 - o FGDs, Observations and Self- report assessments

Nudge Innovation Selection & Development

An open call for concepts was advertised through social media, job pages and universities in August 2019 seeking innovative nudge prototypes to promote improved complementary feeding practices². Interested applicants were given the opportunity to attend a 2-day workshop held by Three Stones to gain deeper understanding of "nudge" theory and the requirements of the call for concepts.





² Call for Concepts found in Annex 2



A total of thirty- six (36) applications were received following the open call. These applications were reviewed and evaluated utilizing the Evaluation Criteria detailed in Table 4. Applications were reviewed by 6 individuals from Three Stones and 6 individuals from the CRS *Gikuriro* program.

- 9 applications were excluded due to not enough relevance to complementary feeding nudges
- 27 application were evaluated individually by Three Stones experts
- 12 applications were shortlisted and shared with CRS *Gikuriro* for their evaluation
- 5 applications were shortlisted and pretested in the community
- 5 shortlisted applicants presented their innovation to the Selection Committee
- 2 final nudge innovations were selected for pilot in the *Gikuriro* program

Selecting the two (2) final nudge innovations for the Pilot

Five innovations were pretested in the community by way of focus group discussions with male and female groups. Participants were asked questions on acceptability, appropriateness and feasibility of each innovation. Each innovation was pretested in Rulindo and Gasabo districts during FGD of 1 male and 1 female per each site and a total of 28 respondents.

Following this, results of the community feedback was presented to the Selection Committee during a 2- hour workshop in which each innovator presented their innovation. The Selection Committee was given the opportunity to ask the innovators questions and receive their responses. The Selection Committee then convened to discuss the presentation and which innovations they found most relevant. Members of the Selection Committee individually scored each innovation using the Evaluation Criteria below:

Table 4: Innovation Evaluation Criteria

| Criteria | Max Score | Score |
|---|-----------|-------|
| Is the Innovation described well and the way it will work? | 20 | |
| Is the idea original/ innovative/ unique? | 10 | |
| Can the materials be locally sourced and are they realistic? | 10 | |
| Is the idea relevant to our themes and nudges theory? | 20 | |
| Will the idea benefit our target audience in the way intended? | 20 | |
| Is the innovation child-friendly and safe? Has the applicant considered this? | 10 | |
| Is the idea presented clearly? | 5 | |
| Is the budget estimate realistic? | 5 | |
| BONUS - considers gender and/ or disability | 5 | |
| | TOTAL | |

The following innovations were shortlisted, pre- tested in the community and presented to the Selection Committee for final selection. These are ranked according to community and selection committee feedback:

#1: Baby Clock "Ishaha Ya Bebe": A home-based wall clock with alarm for use in the home with images of food groups along with key messages. Up to 6 alarms can be set to remind parents to feed their child according to age-specific frequency.

#2: Feeding Chart: A home- based, poster- sized feeding chart showing images of food groups, age- appropriate feeding frequency and images of shared parenting. Incorporates a self-assessment slider painted red and green for parents to indicate which food groups were fed to their child in one day.

#3: Baby Calendar: A monthly wall calendar depending on age of the child, with images showing food groups and age- appropriate feeding frequency. On the bottom section of the calendar has self- reporting scoring indicators for parents to mark how many meals were fed to the child and how many different food groups were given.



#4: Infant Feeding Tablecloth: A large plastic tablecloth to cover a table or use as a mat on the floor with images to encourage diverse diets and age- appropriate feeding frequency for children 6 - 24 months.

#5: Wrist watch or pocket watch for parents with corresponding home nutrition poster: A personal watch with an alarm to set for age-appropriate meal frequency along with an image on inside of watch to promote family and mealtimes. Home poster used images and key messages to indicate food groups and feeding frequency for children 6 - 24 months.



Image: Selection Committee with top two innovators

The Baby Clock and Feeding Chart were scored the highest based on evaluation criteria. The two innovators were extended an internship contract with Three Stones Rwanda. They worked alongside the Three Stones team to further develop their nudge prototype and were completely involved during all of the phases of the innovative nudge prototype pilot. Table 5 details the features of each innovation and images for printing and prototype assembly.



Table 5: Selected Nudge Prototypes for Pilot

Innovation

Baby Clock

A home- based wall clock with alarm for use in the home including images of 7 food groups along with key messages to promote diet diversity, animal source foods and meal frequency. Image in the center of parents sharing child feeding responsibilities. Up to 6 alarms can be set to remind parents to feed their child according to agespecific frequency.

Feeding Chart

A home- based, postersized feeding chart showing images of 7 food groups, age- appropriate feeding frequency and images of shared parenting. Incorporates a self- assessment slider painted red and green for parents to indicate which food groups were fed to their child in one day.

Image







FINDINGS OBJECTIVE 1

Objective 1: Demographics and Complementary Feeding Knowledge

Household surveys were conducted to collect descriptive data of respondents along with complementary feeding knowledge and practices to serve as a baseline for future *Gikuriro* assessments. Participants were selected according to agreed criteria. Parents Lumieres were instrumental in identifying households within *Gikuriro* beneficiaries with children 6 – 24 months.

Feeding Chart

Gikuriro beneficiary families receiving the feeding chart innovation were selected from Kicukiro and Nyabihu districts. Fifty households were identified through beneficiary lists and confirmed at village level. Feeding Charts were distributed to households on September 16 – 19, 2019. Along with distribution, household members along with village Parent Lumieres were instructed on the use of the feeding chart along with key message and image explanations. Household members were given the opportunity to give feedback and ask questions. Thirty (30) households received the feeding chart in Kicukiro, and 20 in Nyabihu. All mothers were present at household at time of delivery and answered the household survey as primary caregiver.



Image: Mother using the sliders on the Feeding Chart to show which food groups the child was fed in last meal

The majority of the women were between the ages of 25 – 34. Most households were maleheaded (88%) with 66% women stating they were married. Thirty- two mothers had 1 – 3 children with two aged 6 – 24 months.

Seventy percent of households declared their main source of income was from day labor. Most mothers indicated that the main food for household consumption came from the market (76%). Observed kitchen gardens were noted in a total of 29 households. Majority of kitchen gardens observed contained green vegetables, carrots, beetroot, and onions. Kitchen garden presence disaggregated by district is provided in Table 6:

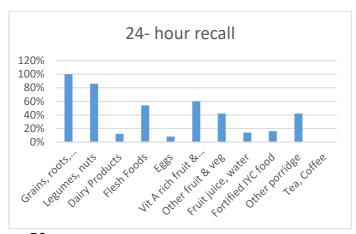


Table 6: Presence of Kitchen Garden by District for recipients of Feeding Chart

| Kitchen garden in last 12 months | Kicukiro | Nyabihu | Grand Total |
|----------------------------------|----------|---------|-------------|
| Yes | 28 | 19 | 47 |
| Kitchen garden absent | 16 | 2 | 18 |
| Kitchen garden present | 12 | 17 | 29 |
| Grand Total | 30 | 20 | 50 |

Complementary feeding knowledge and practices were assessed with questions around appropriate time to introduce complementary feeding, continued breastfeeding, frequency of feeding meals and types of food to feed children from 6 months. The majority of mothers receive information about breastfeeding and complementary feeding from Community Health Workers (CHWs) and Parent Lumieres. While knowledge of when to start complementary feeding and frequency per age group was high at 96%, mothers' definition of complementary feeding was limited with 68% being able to clearly explain what complementary feeding consisted of. Following questions of knowledge, 24- hour recall questions were asked to determine what their children aged 6 – 24 months had been fed in the last day and night. Mother's responses are noted in Table 7 with grains, roots, tubers, legumes and nuts the most common foods.

Table 7: Feeding Chart mothers 24- hour recall of foods fed to child 6 – 24 months



*n=*50



Baby Clock

Gikuriro beneficiary families to receive the baby clock innovation were selected from Kicukiro and Nyabihu districts. Fifty households were identified through beneficiary lists and confirmed at village level. Baby Clocks were distributed to households on November 18 - 21, 2019. Along with distribution, household members along with village Parents Lumieres were instructed on the use of the Baby Clock along with key message and image explanations. Alarms were set for each household depending on age of the child. Household members were given the opportunity to give feedback and ask questions. Twenty households received the Baby Clock in Kicukiro, and 30 in Nyabihu. All mothers were present at household at time of delivery and answered the household survey as primary caregiver.





Image: Parents receiving their Baby Clock at home

The majority of the women were between the ages of 25 – 34. Most households were maleheaded (88%) with 96% women stating they were married. Thirty-seven mothers had 1 – 3 children with one aged 6 – 24 months.

Seventy- eight percent of households declared their main source of income was from day labor. Thirty- one mothers indicated that the main food for household consumption came from the market. Observed kitchen gardens were noted in a total of 42 households. Majority of kitchen gardens observed contained green vegetables, carrots, beetroot, and onions. Kitchen garden presence disaggregated by districted is detailed in Table 8:

Table 8: Presence of kitchen garden by district for recipients of Baby Clock

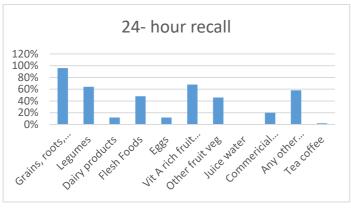
| Kitchen garden in last 12 months | Kicukiro | Nyabihu | Grand Total |
|----------------------------------|----------|---------|-------------|
| Yes | 19 | 27 | 46 |
| Kitchen garden absent | 1 | 3 | 4 |
| Kitchen garden present | 18 | 24 | 42 |
| Grand Total | 20 | 30 | 50 |

The majority of mothers indicated that they receive information about breastfeeding and complementary feeding from Community Health Workers (CHWs) and Parents Lumieres. While



knowledge of when to start complementary feeding and frequency per age group was high at 98%, mothers' definition of complementary feeding was limited with 46% mothers being able to clearly explain what complementary feeding consisted of. Following questions of knowledge, 24- hour recall questions were asked to determine what their children aged 6 – 24 months had been fed in the last day and night. Mother's responses are noted in Table 9 with grains, roots, tubers, Vitamin A rich vegetables and fruit, and legumes and nuts the most common foods.

Table 9: Baby Clock mothers 24-hour recall of food fed to child 6 - 24 months



n = 50

Objective 1: Appropriateness, Acceptability and Feasibility

Measures of appropriateness, acceptability and feasibility were obtained through three waves of data collection with recipients of innovative the Feeding Chart and Baby Clock nudge prototypes: 1) FGDs, 2) Supervised Observation Checklists, and 3) Self- Report Assessments. Mothers, fathers and caregivers were included in FGDs to elicit insights from all household members responsible for child nutrition and feeding.

Appropriateness and Acceptability

Feeding Chart

Mothers and fathers were enthusiastic about the Feeding Chart and all reported continued daily use. No significant differences in responses were noted between districts and sites. Parents agreed that the sliding tool was useful to remind them which food had been fed to the child and a good way to identify any food groups that were lacking in their child's diet for the day. Respondents found the images representative of the foods that are available and affordable in their area. Messages and images were found to be acceptable and appropriate with many expressing their favorite image as the image of parents feeding the child together.

"I think that the tool is useful and attractive and made according to our level of means. Meaning that those foods in the images, we can afford them and they are available in our area." (Mother, Masaka)

Most respondents agreed that the Feeding Chart reminded them to feed the appropriate number of meals to their child according to their ages.

"Because of those images of the sun, it reminds me and my husband that we must feed our child appropriately at least three times per day including snacks." (Mother, Rambura)

All respondents agreed that the Feeding Chart images and sliding indicator reminded them to feed a diverse diet and to try different foods which they usually did not feed their child such as avocado, bananas and animal source proteins.



"The tool really helped me because I no longer feed my child the same type of food every day, I change. For example, I can feed my child Irish potatoes mixed with beans and small fishes in the morning and change with rice and dodo mixed with beans and small fishes in the afternoon." (Mother, Masaka)

"I did not know that an egg can help a child to receive more nutrients. I thought it was too small. Because of the tool I understood that eggs are very important to my child." (Father, Rambura)

One mother described how it reminds her and her husband to plan for the child's meals even when they away from the home.

"The feeding chart reminds us to feed our children a diversity of food even if we go out of the house. We leave [home] after cooking the child's food and pack it to take with us, or we instruct the person who will stay at home how to cook it so that when we return, the child has eaten." (Mother, Masaka)

A few respondents requested handwashing and hygiene images be included in the feeding chart to highlight the importance of hygiene when preparing food.

During household observation of Feeding Chart use, 49 households were observed. Ten mothers (20%) were observed preparing a meal for her child and using the innovation. Of those observed preparing a meal, all were observed using the chart as a reminder to feed a diverse diet. The Feeding Charts were well maintained and being used by households on a daily basis.

Table 10: Feeding Chart Observation Checklist

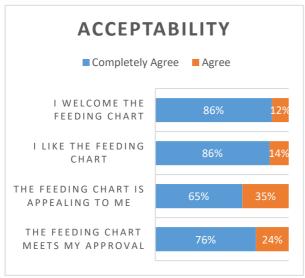
| Setting and Use | Yes | No | N/A |
|--|-------|-----|-----|
| Is the innovation used or set up in the designated setting or during the designated activity? | 100% | 0% | 0% |
| Is the innovation working properly? | 100% | 0% | 0% |
| Acceptability | Yes | No | N/A |
| Is the innovation being used? | 100% | 0% | 0% |
| Are the Feeding Chart food group sliders being used? | 98% | 2% | 0% |
| Appropriateness | Yes | No | N/A |
| Have you observed the mother/father/caregiver preparing a meal for their child? | 20% | 80% | 0% |
| a. If yes, is the innovation playing a role to remind them to feed their child a diverse diet? | *100% | 0% | |
| b. If yes, is the innovation playing a role to remind them to feed the child at the appropriate times and frequency? | *100% | 0% | |
| Is the innovation being used by the intended beneficiary? Mother/ Father/ Caregiver? | 100% | 0% | 0% |
| Feasibility | Yes | No | N/A |
| Is the participant easily using the innovation | 100% | 0% | 0% |
| Is the innovation convenient for the participant to use? | 100% | 0% | 0% |

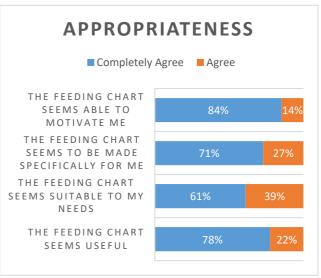
n= 49

^{*}the percentage of those observed preparing a meal and answered "Yes" or "No".



A 5- point Likert Scale was given to each mother to indicate their personal experiences while using the Feeding Chart. All responses given were either "Agree" or "Completely Agree" for the Feeding Chart as follows:





n=49 n=49

Baby Clock

The Baby Clock was well received by all households and no differences noted between districts or male and female participants. The most liked feature of the clock is the alarm, reminding them when to feed their child according to the child's age. Secondly the images depicting different food groups and including the father were acceptable and encouraging.

"This image of the food groups and that alarm! These are very exciting things! They remind us as parents to take care of our children by feeding them a variety of foods at least three times a day. (Mother, Kanombe)

"I really like how the clock has an image that shows a husband seated beside the mother. It shows that it is the responsibility of both male and female parents to feed their child." (Mother, Rugera)

Images of different food groups encouraged parents to purchase and cook a variety of foods for their children. The clock images serve as reminders of what had been purchased and fed the day before, and gave them ideas of what else the child could eat.

"The clock has helped me to buy a variety of foods like fruit. We used to buy only bananas but now we have many choices of fruits to buy for our children." (Mother, Kanombe)

"My husband used to sell all our bananas and eggs, but since we received the clock, he first keeps aside bananas and eggs for the child and then sells the remaining. (Mother, Kanombe)

The alarm was shown to be successful in reminding parents the appropriate times to feed their children.

"The alarm is the most exciting thing. Every time it rings, we all sing 'Baby clock! Baby clock' and we immediately feed our baby. We now know the right time and it encourages us to work together." (Father, Kanombe)



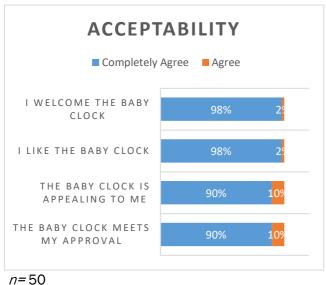
During household observation of the Baby Clock use, a total of 50 households were observed. Fifteen mothers (30%) were observed preparing a meal for her child and using the innovation. On most occasions it was noted that the food was already prepared and the mother was waiting for the clock to ring in order to fee her child. On most occasions, the children became very excited when the alarm rang and would bring their plates to receive their meal. The Baby Clocks were well maintained, in working order and being used by households on a daily basis.

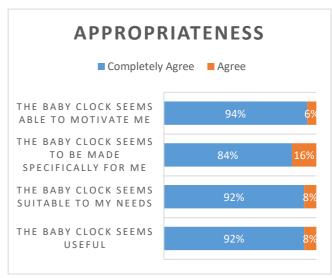
Table 11: Baby Clock Observation Checklist

| Setting and Use | Yes | No | N/A |
|---|-------|-----|-----|
| Is the innovation used or set up in the designated setting or during the designated activity? | 100% | 0% | 0% |
| Is the innovation working properly? | 100% | 0% | 0% |
| Acceptability | Yes | No | N/A |
| Is the innovation being used? | 100% | 0% | 0% |
| Are the baby clock alarms being used? | 100% | 0% | 0% |
| Appropriateness | Yes | No | N/A |
| Have you observed the mother/father/caregiver preparing a meal for their child? | 30% | 70% | 0% |
| a. If yes, is the innovation playing a role to remind them to feed their child a diverse diet? | *100% | 0% | |
| b. If yes, if the innovation playing a role to remind them to feed the child at the appropriate times and frequency? | *100% | 0% | |
| Is the innovation being used by the intended beneficiary? Mother/ Father/ Caregiver? | 98% | 2% | 0% |
| Feasibility | Yes | No | N/A |
| Is the participant easily using the innovation | 100% | 0% | 0% |
| Is the innovation convenient for the participant to use? | 100% | 0% | 0% |

n = 50

A 5- point Likert Scale was given to each mother to indicate their personal experiences while using the Baby Clock. All responses given were either "Agree" or "Completely Agree" as follows:





n = 50

A few respondents suggested to change the image to show father more active in feeding the child by holding a plate or the child. Others requested an image of hand hygiene to be added.

^{*}the percentage of those observed preparing a meal and answered "Yes" or "No".



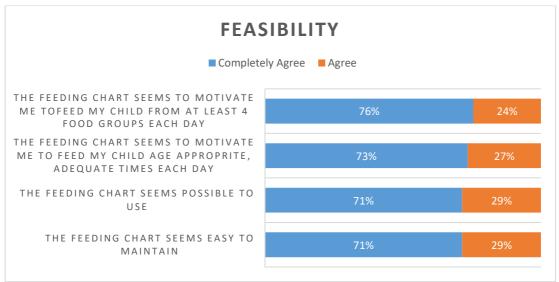
Feasibility

Feeding Chart

All respondents agreed that they will continue to use the feeding chart as daily reminders of what to feed their children and the appropriate time to feed their children. Some noted that they would continue to use the chart even once their child is over 2 years old because they found the information important for the whole family. Most have shared the information from the feeding chart with their neighbors and have also showed them how they use the chart.

"This tool will be our heritage in our families. Everyone says that Nyabihu district has the highest prevalence of malnourished children, so that is why we will keep using this nudge to fight against malnutrition here". (Father, Rambura)

During self- report assessments, mothers indicated that they agreed or completely agreed with all feasibility statements as follows:



n = 49

Baby Clock

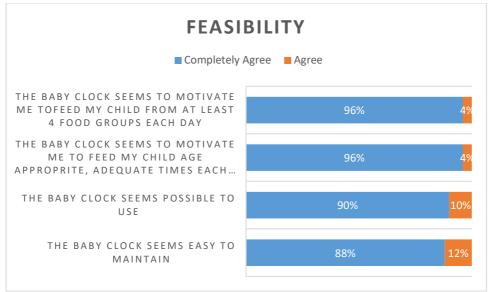
All respondents agreed that they will continue to use the Baby Clock as daily reminders of what to feed their children and the appropriate time to feed their children. Some noted that they would continue to use the chart even once their child is over 2 years old because they found the information important for the whole family. Most agreed that the Baby Clock relays important information for parents to practice optimal child feeding behaviors and wished the clock to be available for their neighbors and in their community.

"I also talked to my neighbor about the Baby Clock. We live close to each other and when it rings, she also hears the sound and it reminds her to feed her child." (Mother, Rugera)

"This clock uses the same batteries that we use for other items in our home. It is easy to maintain and afford the upkeep." (Mother, Kanombe)

During self- report assessments, mothers indicated that they agreed or completely agreed with all feasibility statements as follows:





n = 50

To further determine feasibility of options for future scale- up and evaluation of impact, each innovative nudge prototype estimated production costs are noted below. Costs may vary based on the number of items, availability of vendors, and strategy for procurement. Material specifications and procurement process of prototypes are outlined in Annex 3 & 4 respectively.

Financial breakdown for Feeding Chart production:

| 6 | | |
|---------------------------|------------|--|
| Item | Cost (Rwf) | |
| Wooden frame with painted | 8,000 | |
| sliding indicators | | |
| Printing of sticker | 5,000 | |
| Maintenance (paint per | 1,000 | |
| annum) | | |
| TOTAL (Rwf) | 14,000 | |

Financial breakdown for Baby Clock production:

| i mandai breakaowii ioi baby blook production: | | |
|--|------------|--|
| Item | Cost (Rwf) | |
| Clock Manufacturing, printing | 18,000 | |
| and shipping | | |
| Maintenance (batteries per | 2,000 | |
| annum) | | |
| TOTAL (Rwf) | 20,000 | |

Male Engagement and Couple Communication

Mothers and fathers all agreed that both innovations encouraged them each to take responsibility for feeding the right foods to their children and at the right times. Some indicated that they now speak together about meals for their children, which is new behavior for them. This sentiment was the same in both districts, for both men and women groups. Men agreed that the Feeding Chart encouraged them to contribute not only financially to the family nutrition, but also to help feed their children nutritious foods.

"In the morning I ask my wife which food we can purchase for our home by looking at all 7 food groups on the chart. She tells me that yesterday we bought this and that as indicated by green color and we agree what we are going to purchase for today something different than yesterday. This is something we have not done before and it is good." (Father, Rambura)



"I liked the images showing a mother who is breastfeeding and feeding the child while being together with her husband. It shows both parents are important for the baby's health." (Mother, Masaka)

"The Baby Clock teaches us to work together and for both of us to think about nutrition of our children. When we sit in the room and we see the clock, it reminds us what to buy." (Father, Kanombe)



FINDINGS OBJECTIVE 2

Objective 2: Unique SBCC for Compound Hygiene and Complementary Feeding

To address the overarching goal of this collaboration and further enhance the reach of *Gikuriro* program activities, Objective 2 of this assignment aimed to identify, develop and test unique SBCC messages and materials for improved complementary feeding and compound hygiene practices for National level consideration. Utilizing data extracted through the literature review, behaviors to promote and unique entry points for messaging and materials were identified. The Action Research Cycle of pre-testing and learning ensured messages and materials developed were appropriate to the target community. Materials developed for Objective 2 are listed below³.

- 1. Complementary Feeding Poster
- 2. Complementary Feeding teaching aid brochure
- 3. Compound Hygiene Poster

Objective 2: Demographics

Pre- test FGDs were conducted to gain insights and perspectives from mothers, fathers and caregivers of children under two regarding the acceptability, appropriateness and feasibility of unique complementary feeding and compound hygiene messages and images. Considering the feedback from the community, the most appropriate and effective channels of message delivery and materials were identified and documented for confirmation through the Selection Committee.

The FGD guide focused on identifying the most appropriate messages, images, channels of communication, materials and audience to target, through perspectives of the community. Four FGDs were conducted with 1 male (15) and 1 female (15) FGD per location for a total of 30 participants. Participants selected were not couples.

Objective 2: Acceptability, Appropriateness and Feasibility

Complementary Feeding Images and Messages

In general images and messages were well received by the community. Complementary feeding images and messages for optimal feeding practices were not new to the community, as many had heard these messages and would try to practice them. What participants found new and most interesting was the involvement of men in childcare and feeding activities, as well as encouraging couple communication regarding child feeding.

"I liked the image showing mother and father working together to feed their children." (Mother, Rural)

"When my husband sees this image of different foods, he can be motivated to buy the food a child needs at home". (Mother, Rural)

"This image is showing parents feeding their child with love and care, working together as a team. I like this very much." (Mother, Urban)

All images and messages were understandable and acceptable to both women groups. Most stated that the images and messages encourage them to aspire to model the best behavior for a healthy family. It was all but one woman's first time to hear the messages encouraging couple communication about child feeding.

"We all like this very much. It teaches responsibility of both wife and husband to feed their child and talk to each other." (Mother, Rural)

Men in both settings liked the images and easily spoke about what the images were encouraging them to do. The most liked images were father's contribution to feeding his child, encouraging men to take part in childcare and the hygiene image. The new information they received through

-

³ Full specifications and cost breakdown in Annex 3



these images was the involvement of the father.

"The father's contribution of feeding his baby shows that it makes the family happy, it means that they discuss what they feed their child and are a team." (Father, Urban)

"This is the first time we have heard this message. I like the good cooperation shown between the husband and his wife. This message encourages men to work with their wives on their children's feeding plan for the health of the family." (Father, Rural)

New and the most interesting information parents received through these materials was promoting fathers to have an active role in child feeding and care, encouragement of couple communication, and images depicting foods to provide a diverse diet with messages encouraging animal source food consumption. Following respondent and Selection Committee feedback it was agreed that messages and images will target mothers, fathers and caregivers. The most appropriate channels of message delivery should be through CHWs and Parents Lumieres as they are the most trusted by the community. Other appropriate channels of message delivery could come through Inshuti z'Ubuzima (Friends of Families) and women councils at cell level, as they have been trained on couple communication and positive parenting. Messages and images will be developed into teaching aids such as informational brochures for training sessions by CHWs as well as large posters for display.

Messages should be delivered during community meetings, Umuganda, home-based ECD centers and kitchen village sessions. Posters to be portable and displayed in high traffic areas such as at health center, growth monitoring promotion sessions and the market place.

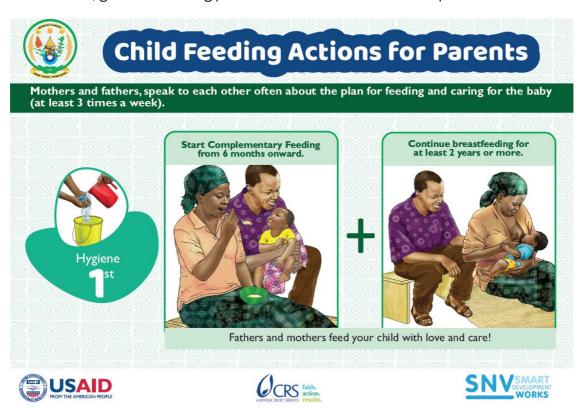


Image: Complementary Feeding Poster

Compound Hygiene messages and images

Compound hygiene images and messages produced the most discussion and excitement in the community. All groups appreciated the aspirational quality of the images, showing a model household and compound and how the parents interacted with each other and their child, as well as how they were dressed and how the compound and house were organized. All groups most



liked the image of the father playing with the child, showing men's involvement in childcare and how parents are working together. New and most interesting information for participants included images that encourage families to make hygiene a priority, using a mat for their children, not only for when the child is eating but also for play, encouragement of father involvement in childcare and the promotion of couples working in harmony for health and hygiene of the family

Women were most attracted to the image of the father playing with the child and the orderliness of the compound with all necessary facilities for a hygienic life. Use of a mat for allowing the child to play was new for mothers to see and they liked the idea of it. Women in the rural area also stated that it was rare to see a father playing with a child, but that they liked how the image showed the model family.

"This gives us a household and family life to aspire to, to model after. My husband can be encouraged by this image." (Mother, rural)

"Using a mat for play is new to me. We use it when feeding the child, but I see it also to promote hygiene if my child is playing on it." (Mother, Urban)

Both male groups also liked the images showing a model house and compound. They mostly liked the images of the infrastructure, toilet with cement floor and the handwash station. Many liked the image of the family playing with the child and that the parents were working together as a family unit, even if it is uncommon.

All images and messages were understandable, acceptable and appropriate for the audience. There was nothing offensive about the images or messages. Most respondents stated that the images encourage them to aspire to the model household.

It was agreed that CHWs and Parent Lumieres are best suited to deliver these messages and community leaders through community hygiene clubs. Large posters in high traffic areas such as schools, health facilities, home- based ECDs and sector situation rooms. It was also suggested that mural painted on the side of *Gikuriro* water kiosks would be appropriate areas to encourage compound hygiene.



Image: Compound Hygiene Poster



CHALLENGES AND LESSONS LEARNED

It was agreed in the early stages that the Baby Clock was the most interesting and unique innovation to promote optimal IYCF practices. It was the most appealing to the community as well as the Selection Committee. The process of finding suppliers that produce a wall clock with a face large enough to hold the complementary feeding images and messages and the ability to set at least three alarms proved to be difficult. No local or regional ready- made clocks with these specifications were found. Production of the analog clock with digital alarms for the most reasonable price came out of China. Production took months to achieve the correct specifications, but good quality products meeting the requirements were achieved after much follow up. This brought about delays in distribution of the Baby Clock.

Assessment of acceptability, appropriateness and feasible are an important first step in the development of the most effective tools to promote priority behaviors for complementary feeding and compound hygiene. This assignment focused solely on identifying innovations for potential impact assessments through *Gikuriro* and cannot show effectiveness or comparable results.

CONCLUSIONS

Utilizing an Action Research Cycle to gain valuable insight and perceptions from the community and experts throughout the development process has ensured the innovations and materials developed are the most acceptable, appropriate and feasible options for the target population. An engaged and committed steering committee formed in the early stages of the process built a sense of ownership and critical buy-in from decision- makers to facilitate the process and gain support from appropriate technical working groups. Open and consistent communication between Three Stones and the *Gikuriro* management team ensured alignment with program objectives and the ability to navigate delays and maintain a professional and collegial working relationship.

According to 100 participant views and input, both nudge innovations offer families acceptable, appropriate and feasible solutions to promote optimal complementary feeding actions, as well as promote couple communication and the involvement of fathers in child feeding and care. Both nudge innovations were met with enthusiasm from participants with early results showing change in knowledge regarding diet diversity, meal frequency, couple communication and father's engagement. Home-based nudge innovations proved promising to promote priority behaviors for improved complementary feeding practices, compound hygiene practices and couple communication.

RECOMMENDATIONS

Based on the qualitative assessment to identify acceptable, appropriate and feasible solutions to promote priority behaviors for child feeding, the following recommendations have formed:

- 1. Impact of home- based nudge innovations on complementary feeding knowledge and practices and child nutrition status indicators could be further explored through an end-line evaluation four to six- months from households receiving the innovation and training.
- 2. Immediate scale- up to increase household sample size to receive selected innovation would increase reliability and necessary in order to conduct quantitative assessment with confidence in the power of results.
- 3. Utilize anthropometric measurements obtained through growth monitoring records along with raw data of household survey collected through this assignment for further analysis
- 4. Impact evaluation outcomes including a cost- analysis would further support affordability of the innovations for the *Gikuriro* program and clarify potential scale- up options.
- 5. Adopt a one-for-one business model to create demand for nudge innovation, identifying a cost- effective price point for sale of innovation. Profits gained from Baby Clocks sold on the open market to feed back into *Gikuriro* program to supply beneficiaries with the homebased innovation.



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ANNEXES

Annex 1: Data Collection Tools

Gikuriro SBCC Innovations

PILOT

DATA COLLECTION PROTOCOL

Research Framework

Utilizing the SPRING conceptual framework of the pathways from SBCC delivery strategies to improved MIYCN practices(1), key questions of the pilot will focus on behavioral determinants (Demand, Environment and Supply) described in Table 1. This will serve as the analytical frame during synthesis of results and the development of findings and recommendations of the final report.

Together with the analytical frame, *Acceptability, Appropriateness* and *Feasibility* of nudge prototypes and key messages will be qualitatively and quantitatively measured through focus group discussions and a self- report survey based on the following definitions:

Acceptability- The extent to which beneficiaries find the nudge prototypes likeable, agreeable or satisfactory and addressed their perceived needs;

Appropriateness- The perceived fit, relevance or compatibility of the nudge prototypes for the beneficiary in rural or urban settings; and/ or perceived fit of the nudge prototype to remind beneficiaries to practice recommended complementary feeding practices for children under 2; **Feasibility**- Extent to which the nudge prototypes are perceived to be easily, conveniently or successfully used within the given setting.

Table 1: Research Framework

| Determinant | Key Questions | |
|-------------------|--|--|
| Demand | Are nudge prototypes desirable and acceptable to target audience? | |
| (Acceptability) | | |
| Environment | Do innovative nudge prototypes developed for MMF and MDD targeting | |
| (Appropriateness) | CU2 show potential for improved complementary feeding practices? | |
| | | |
| | Are nudges contextually appropriate to scale in other <i>Gikuriro</i> districts? | |
| Supply | Are the nudge prototypes sustainable, feasible and scalable? | |
| (Feasibility) | | |
| | Do appropriate actors have the capacity to create a scalable outcome? | |

Target Respondents

Primary respondents are considered as mothers and fathers who have children between 6 to 24 months of age and are beneficiaries of the Gikuriro project and members of the Village Nutrition School (VNS). Secondary respondents are considered caregivers of these children between 6 to 24 months of age whose parents are beneficiaries of the Gikuriro project and members of the VNS.



Data Collection Tools

Data collection will be conducted in accordance with the identified data needs and agreed methodology. Coordinators will take the lead in field collection. Household survey and FGD tools have been developed to support the specific needs of the pilot, and Three Stones will ensure training and supervision of the field coordinators and adherence to data collection protocols through the presence of a field manager selected for this assignment. Quantitative data collected through the household survey will be accomplished with an integrated suite from KoBo Toolbox. KoBo Toolbox is an open-source project for field data collection developed and supported by the Harvard Humanitarian Initiative and its partners. From the central data storage, Three Stones will monitor the progress of the data collection effort and explore the data to identify potential problems or begin analysis.

For household survey data collection, the coordinators will be trained to use the tablet-based questionnaires ensuring data security and quality. In addition, they will be instructed on basic device care and management, including optimization of battery life and network setting management. Each coordinator will also be able to complete the survey with a paper version of the questionnaire, in case of theft, loss, or failure of the device. FGD transcripts are uploaded and secured onto a password protected laptop at the end of each day of data collection.

Household Survey

Household surveys will be conducted at the beginning of the pilot followed by introduction and implementation of the nudge prototype at household level. The household questionnaire has been developed based on Gikuriro Midterm Assessment indicators, 2014-15 RDHS(2,3) household questionnaire and FAO guidelines(4) and adaptable questionnaires on complementary feeding knowledge and practices tools. Data collected will consist of: i) Sociodemographic Information, ii) Knowledge of Complementary Feeding, and iii) Complementary Feeding Practices of mother/father caregiver. A total of 100 households will be surveyed, 50 per site.

Focus Group Discussions

FGDs will consist of four groups per site, two female and two male parent groups with 6 – 10 participants each from the participant households. Two rounds of FGDs will be conducted at Week 2 and Week 4 of nudge prototype implementation to measure acceptability, appropriateness and feasibility of each innovation tested. FGDs will be documented by note- taking and conducted in Kinyarwanda. FGD guide has been tested with participants during pretest of innovation nudges and adapted as necessary.

Observation Checklist

Three Stones coordinators will conduct household visits to observe utilization of nudge prototypes by participants. Household visits will be conducted at Week 1 and Week 3 of implementation. Data will be collected by used of an Observation Checklist to record setting and use; acceptability; appropriateness and feasibility of nudge prototype.

5- Point Likert Scale Participant Survey

Utilizing a Likert Scale to measure participants views on acceptability, appropriateness and feasibility(5) of the nudge prototype, this survey will be administered to individual participants following FGDs.



Household Survey

| Date of Interview | (DD/ MM/ YY) |
|--|--|
| Household Code | |
| Coordinator Code | |
| | |
| ltariki y'lkiganiro | (Umunsi/ Ukwezi/ Umwaka) |
| Nimero iranga Urugo | |
| Nimero Iranga Ubaza | |
| | |
| Introduction | |
| Program. In this district (Name of local CSO part on innovative tools that feeding practices. With tools and materials couremember to feed child foods and a diverse die All information gathere participant. You are no interview at any time. If this interview, and proving the policy of the policy of the participant of the participant of the participant. | from Three Stones and working with CRS Gikuriro ct, Gikuriro works with the organization there). We are gathering information and views of parents and caregivers that may help you to adopt and maintain optimal infant and young child in this information we will be able to better understand which innovative all the better developed within Gikuriro for parents to use to help them to the first of appropriate and safe complementary et in addition to breastfeeding. If the complete in this survey will be anonymous and not attributed to any of obligated to respond to any of our questions and you can stop the However, we kindly request your active and fully voluntary participation in wide the most accurate information to the best of your knowledge. |
| Consent given: Y/ N | |
| Kwibwirana | |
| Amazina yanjye ni nturuka mu kigo kitwa Three Stones kandi turi gukorana na CRS Gikuriro. Muri aka karere, Gikuriro ikorana n'ikigo (Izina y'ikigo cy'abafatanyabikorwa kitegamiye kuri leta). Turi gushaka amakuru n'ibitekerezo by'ababyeyi n'abita ku bana ku bijyanye n'amashushongero ashobora kubafasha kugirango mushyire mu bikorwa ibikorwa byo kugaburira impinja n'abana bato. Hamwe n'aya makuru uzabasha kumenya ishushongero n'ibikoresho bishobora kuzakorwa na Gikuriro kugirango bikoreshwe n'ababyeyi mu kubibutsa guha abana bari hagati y'amezi 6 – 24a imfashabere kwiye kandi iteguwe neza ndetse no kunyuranya indyo byiyongera ku mashereka. | |

Amakuru yose turi bukusanye muri iki kiganiro azaguma ari ibanga ndetse ntazitirirwa uwitabiriye ikiganiro uwo ari we wese. Ntabwo utegetswe gusubiza ku kibazo icyo ari cyo cyose mu bibazo byacu kandi ushobora guhagarika ikiganiro igihe icyo ari cyo cyose. Ariko, turabasaba kugira

uruhare muri iki kiganiro no kuduha amakuru nyayo ajyanye n'ibyo muzi.



Ese wemeye kugira uruhare muri iki kiganiro?

Atanze uburenganzira: Yego/Oya

Instructions

Questions in Section I relate to sociodemographic information with corresponding coded answers. Questions in Section II are based on mothers or other caregivers complementary feeding understanding and practices. It is very important that you ask each question exactly as it is written on the questionnaire. If the mother or caregiver does not understand the question, you may need to use extra probing questions. Probing questions will be discussed during interviewer training. It is important that all interviewers use the same probing questions. In addition to the questions, there are statements that appear all in capital letters. These are interviewer instruction, and should not be read aloud to the mother/caregiver. Most questions have precoded responses. It is important that you do not read these choices aloud. When you ask a question, you should listen to the mother/ caregiver answer, then input code into tablet.

Amabwiriza

Ibibazo biri mu Gice cya I bijyanye n'amakuru ajyanye n'ibibaranga ndetse n'aho batuye hamwe n'ibisubizo bijyanye n'ibyo bashobora gutanga. Ibibazo biri mu Gice cya II bishingiye ku myumvire ndetse n'ibikorwa ababyeyi b'abagore cyangwa abandi bita ku bana bakora bijyanye no guha umwana imfashabere. Ni ingenzi cyane ko ubaza buri kibazo nkuko cyanditswe. Niba umubyeyi w'umugore cyangwa uwita ku mwana batumva ikibazo, ushobora kubaza ibindi bibazo kugirango usobanuze neza. Ibibazo ushobora kubaza mu rwego rwo gusobanuza kurushaho bizaganirwaho mu gihe cy'amahugurwa y'abazabaza. Ni ingenzi cyane ko abazabaza bose bakoresha ibibazo bimwe mu gusobanuza kurushaho. Ikindi kiyongera kuri ibi bibazo, hari interuro zigaragara mu nyuguti nkuru, akaba ari amabwiriza y'umuntu uri kubaza, kandi ntabwo ugomba kuyasomera uwo mubyeyi w'umugore/uwita ku mwana. Ibibazo byinshi bifite ibisubizo byabyo bikozwe. Ni ingenzi cyane ko udasomera urwo rutonde rw'amahitamo. Igihe ubajije ikibazo, ugomba gutega amatwi igisubizo cy'uwo mubyeyi w'umugore/uwita ku mwana, noneho nyuma ugahitamo igisubizo kijyanye n'ibyo yavuze.

SECTION I: SOCIODEMOGRAPHIC INFORMATION

IGICE 1: AMAKURU AJYANYE N'IBIBARANGA NDETSE N'AHO BATUYE

| Number | Question | Coding Categories |
|---------|------------------------------------|-----------------------|
| Umubare | Ikibazo | Ibwoko bw'ibisubizo |
| 1. | District | 1= Kicukiro |
| | Akarere | 2= Nyabihu |
| 2. | Sector | 1= Masaka |
| | Umurenge | 2= Rambura |
| 3. | Gender | F/ M |
| | Igistina | Gore/Gabo |
| 4. | Respondent | 1= Mother |
| | Ubazwa | 1= Umubyeyi w'umugore |
| | | 2= Caregiver |
| | | 2= Uwita ku mwana |
| 5. | Age of Primary Respondent (mother) | Year of birth |



| | Imyaka y'umubyeyi w'umugore | Umwaka yavutsemo |
|--------------|--|-------------------------------------|
| 6. | Age of caregiver (Should primary | Year of birth (should appear if the |
| | respondent be absent) | primary respondent is absent) |
| | Imyaka y'uwita ku mwana | Umwaka yavutsemo |
| 7. | Marital Status | 1= Single |
| | Irangamimerere | 1= Ingaragu |
| | | 2= Married |
| | | 2= Arubatse |
| | | 3= Divorced |
| | | 3=Yatandukanye n'uwo bashakanye |
| | | 4= Widow/ Widower |
| | | 4= Yarapfakaye |
| | | 5= Cohabiting |
| | | 5= Abana n'umugabo mu buryo |
| | | butemewe n'amategeko |
| | | 6= Other |
| | | 6= Ibindi |
| 8. | Household type | 1= Male headed |
| | Imiterere y'Urugo | 1= Urugo ruyobowe n'umugabo |
| | | 2= Female headed |
| | | 2= Urugo ruyobowe n'umugore |
| | | 3= Child headed |
| | | 3= Urugo ruyobowe n'umwana (ni |
| | | uri munsi y'imyaka 18) |
| 9. | Ubudehe Category | 1= 1 |
| | Ikiciro cy'Ubudehe | 2= 2 |
| | | 3= 3 |
| | | 4= 4 |
| 10. | Number of children | 1= 1-3 |
| | Umubare w'abana ufite | 2= 4-5 |
| 4.4 | | 3= 6+ |
| 11. | Number of children 6 to 24 months | (give number of children 6 – 24 |
| | Umubare w'abana bari hagati y'amezi 6 | months. If more than one, create |
| | kugeza kuri 24 | duplicate from question 40 - |
| 10 | Number weeks shildren C to O4 recentles | |
| 12. | Number male children 6 to 24 months | |
| | Umubare w'abana b'abahungu bari hagati | |
| | y'amezi 6 kugeza kuri 24 | |
| 13. | Number female children 6 to 24 months | |
| 13. | Umubare w'abana b'abakobwa bari hagati | |
| | y'amezi 6 kugeza kuri 24 | |
| | y amezi o kugeza kun 24 | |
| 14. | Main source of household income | 1= Sale of agriculture produce |
| ⊥ -⊤. | Ahantu h'ingenzi amafaranga atunga urugo | 1= Mu kugurisha umusaruro |
| | akunze guturuka | uturuka mu buhinzi |
| | | 2= Sale of livestock |
| | | 2= Mu kugurisha amatungo |
| | | 3= Day laborer |
| | | 3= Ibiraka byo ku munsi |
| | | 4= Remittances |
| | | 4= Mu bwishyu |
| | | 5= Full- time employment |
| | | 5= Akazi gahoraho |
| | | 6= Trading/ small business |
| | | o mading sindi basiness |



| | INTERNATIONAL | |
|-----|---|--|
| 15. | Main source of food for household | 6= Mu bucuruzi 7= Savings 7= Mu bwizigame 8= Loans 8= Mu nguzanyo 9= Other (casual work, landlord, etc.) 9=lkindi (Akazi kadahoraho, ufite ahantu ukodesha,) 1= Harvesting |
| | consumption Ahantu h'ingenzi ibiryo bitunga urugo bituruka | 1=Umusaruro w'ubuhinzi 2= Buying food from market 2= Kugura ibiryo ku isoko 3= Begging 3= Mu gusabiriza 4= Other (specify) 4= Ibindi (Sobanuza) |
| 16. | Have you had a kitchen garden in the past 12 months? Ese wigeze ugira akarima k'igikoni mu mezi 12 ashize? | Y/ N Yego/Oya |
| 17. | Do you have a kitchen garden now? Ese ubu ufite akarima k'igikoni? | 1= Kitchen garden present 1= Hari akarima k'igikoni 2= Kitchen garden absent 2= Nta karima k'igikoni gahari (verify by observation) (Reba neza ko gahari) |
| 18. | Types of vegetables and other nutritious crops grown in kitchen garden Ubwoko bw'imboga ndetse n'ibindi bihingwa bifite intungamubiri bihingwa mu turima tw'igikoni | 1= Iron rich beans 1= Ibishyimbo bikungahaye ku butare 2= Carrots, beet roots, onions 2= Karoti, beterave, ibitunguru 3= Green vegetables 3= Imboga zifite ibara ry'icyatsi kibisi 4= Orange- fleshed sweet potato (Vit A rich) 4= Ibijumba bifite ibara rya oranje 5= Other 5= Ibindi |
| 19. | Are you a member of Savings and Internal Lending Communities (SILC)? Ese waba uri umunyamuryango w'itsinda ryo kubitsa no kugurizanya rya Gikuriro? | Y/ N Yego/Oya |
| 20. | Are you a member of Farmer Field Learning Schools (FFLS)? Ese waba uri umunyamuryango w'itsinda ry'umurimashuri rya Gikuriro? | Y/ N Yego/Oya |
| 21. | Are you a member of Village Nutrition School (VNS)? Ese waba uri umunyamuryango w'ishuri mbonezamirire ryo mu mudugudu rya Gikuriro? | Y/ N Yego/Oya |



SECTION II: KNOWLEDGE OF COMPLEMENTARY FEEDING

IGICE CYA II: UBUMENYI KUBIJYANYE N'IMFASHABERE

| Number | Question | Coded Categories |
|---------|--|---|
| Umubare | Ibibazo | |
| 22. | What is complementary feeding? Imfashabere ni iki? | 1= The addition of solids only to breastfeeding 1= Ni ibiryo bikomeye byiyongera ku mashereka 2= Introduction of solids, semisolids, soft foods and or liquids to a child's diet with continued breastfeeding 2= Ni uburyo bwo gutangira guha umwana ibiryo bikomeye, bidakomeye kandi bitanoroshye, ibyoroshye cyangwa se ibinyobwa kandi agakomeza konka. 3= Adding infant formula to a child's meal 3= Kongerera umwana amata yo mu bikombe yagenewe abana bato ku ifunguro 4= I don't know 4= Simbizi |
| 23. | How did you know about complementary feeding? Ni gute wamenye ibijyanye n'imfashabere? | 1= CHW 1=Abajyanama b'ubuzima 2= Family member/ friends 2= Abagize umuryango/ Inshuti 3= Parent Lumiere 3= Ababyeyi b'urumuri 4= Health Personnel 4= Ushinzwe ubuzima(abaganga/abaforomo) 5= Media Campaigns 5= Ubukangurambaga bukozwe n' itangazamakuru 6= other (specify) 6= Ibindi (Sobanuza) |
| 24. | At what age is it recommended to introduce complementary feeding? Ni ku kihe kigero umubyeyi akwiye gutangira guha umwana imfashabere? | 1= < 2 months 1= < amezi 2 2= 3 - 5 months 2= hagati y'amezi 3 na 5 3= 6 months 3= amezi 6 4= 7-9 months 4= hagati y'amezi 7 na 9 5= I don't know 5= Ntabwo mbizi |
| 25. | Until what age is it recommended to continue breastfeeding? Ese ni ukugeza ku kihe kigero umubyeyi agomba gukomeza konsa? | 1= Until 6 months 1= kugeza ku mezi 6 2= Until 8-10 months 2= kugeza ku mezi 8 na 10 3= Until 12-14 months 3= kugeza ku mezi 12 na 14 |



| - | INTERNATIONAL | |
|-----|---|---|
| | | 4= Until 18- 23 months 4= kugeza ku mezi 18 na 24 5= Until after 24 months 5= kugeza nyuma y'imyaka 2 6= I don't know 6= Simbizi |
| 26. | How frequently should a child breastfeed after they start on other foods? Ni inshuro zingahe umwana akwiye konswa nyuma yo gutangira guhabwa ibindi biryo? | 1= 2 times 1= Inshuro 2 2= as often as the child desires 2= Inshuro zose umwana abishaka 3= 3 times 3= Inshuro 3 4= I don't know 4= Simbizi |
| 27. | How often should you give complementary foods in a day for a child 6 – 8 months who is breastfed? Ni inshuro zingahe ku munsi ugomba guha imfashabere umwana w'amezi 6 – 8 wonka? | 1= < 2 times 1= < inshuro 2 2= 2-3 times 2= Hagati y'inshuro 2 na 3 3= 3-5 times 3= Hagati y'inshuro 3 na 5 4= I don't know 4= Simbizi |
| 28. | How often should you give complementary foods in a day for a child 9-11 months who is breastfed? Ni inshuro zingahe ku munsi ugomba guha imfashabere umwana w'amezi 9 – 11 wonka? | 1= < 3 times 1= < inshuro 3 2= 3-4 times 2= Hagati y'inshuro 3 na 4 3= 4-6 times 3= Hagati y'inshuro 4 na 6 4= I don't know 4= Simbizi |
| 29. | How often should you give complementary foods in a day for a child >12 months who is breastfed? Ni inshuro zingahe ku munsi ugomba guha imfashabere umwana ufite amezi ari hejuru ya 12 wonka? | 1= < 3 times 1= Inshuro ziri munsi ya 3 2= 3-4 times 2= Inshuro ziri hagati ya 3-4 3= 4-6 times 3= Inshuro ziri hagati ya 4-6 4= I don't know 4= Simbizi |
| 30. | A Child between 6 to 24 months should have a diet consisting of: (Food types) Umwana uri hagati y'amezi 6 kugeza kuri 24 agomba guhabwa ifunguro rigizwe na: (Ubwoko bw'ibiribwa) | |
| 31. | a. Processed cereals (names) Ibinyampeke byatunganijwe mu ruganda (amazina) | Y/ N Yego/Oya |
| 32. | b. Usual family foods (rice, yam, bread, beans, fish, etc.) Ibiribwa urugo rusanzwe rukoresha (Umuceri, ibikoro, umugati, ibishyimbo, ifi, ibindi) | Y/ N Yego/Oya |
| 33. | c. Varieties of family foods made softer with additional proteins | Y/ N Yego/Oya |



| | Amafunguro atandukanye, | |
|----|--|---------------------------------------|
| | _ | |
| | yoroshye kandi yongerewemo | |
| 24 | intungamubiri akoreshwa mu rugo | N/AI |
| 34 | d. Tea, sweets, chocolates and soft | Y/ N |
| | drinks | Yego/Oya |
| | Icyayi, ibombo, shokola | |
| | n'ibinyobwa bikorerwa mu nganda | |
| 35 | e. Normal adult milk | Y/ N |
| | Amata asanzwe y'abantu bakuru | Yego/Oya |
| 36 | f. Fruits and vegetables | Y/ N |
| | Imbuto n'imboga | Yego/Oya |
| 37 | g. Animal source proteins (fish, meat, | Y/ N |
| | eggs, dairy) | Yego/Oya |
| | Ibikomoka ku matungo (ifi, inyama, | |
| | amagi n'amata) | |
| 38 | What is the risk of starting complementary | 1= Better development |
| | feeding late? | 1= Gukura neza |
| | Ni izihe ngaruka ziterwa no gutangira guha | 2= Malnutrition |
| | umwana imfashabere utinze? | 2= Imirire mibi |
| | | 3= Increased height |
| | | 3= Gukura mu burebure |
| | | 4= No risk |
| | | 4= Nta ngaruka |
| | | 5= Other (Specify) |
| | | 5= Ibindi (Sobanuza) |
| 39 | What is the risk of starting complementary | 1= Better development |
| | feeding early? | 1= Gukura neza |
| | Ni izihe ngaruka ziterwa no gutangira guha | 2= Malnutrition, infection or choking |
| | umwana imfashabere hakiri kare? | 2= Imirire mibi, indwara zandura |
| | | cyangwa kunigwa n'ibiryo |
| | | 3= Increased height |
| | | 3=Gukura mu burebure |
| | | 4= No risk |
| | | 4=Nta ngaruka |
| | | 5= Other (Specify) |
| | | 5= Ibindi (Sobanura) |
| | | 5- Ibiliul (Suballula) |

SECTION III: COMPLEMENTARY FEEDING PRACTICE OF MOTHER/ CAREGIVER

IGICE CYA III: IBIKORWA UMUBYEYI W'UMUGORE/UWITA KU MWANA AKORA BIJYANYE NO GUHA UMWANA IMFASHABERE

| Number Umubare | Questions Ibibazo | Coded Response |
|-------------------|--|---|
| 40 | What is the age of your child now? Umwana wawe afite igihe kingana iki ubu? | (Age in months) 6) (Imyaka mu mezi) 6) |
| 41 | Do you breastfeed your child of 6 to 24 months? Ese wonsa umwana wawe w'amezi hagati ya 6 na 24? | Y/ N (if N, skip to question 46 & 47 Yego/oya (niba ari oya, simbuka ujye ku kibazo cya 46 na 47) |
| 42 | How many times did you breastfeed your child yesterday in the last day and night? | 1= 2 times 1=Inshuro 2 2= 3 times 2= Inshuro 3 |



| | Ni inshuro zingahe wonkeje umwana wawe | 3= on demand |
|----|---|---|
| | umunsi w'ejo hashize haba ku manywa na | 3= Igihe cyose umwana abishatse |
| | nijoro? | 4= > 3 times |
| 40 | W/least age consequence in the consequence at a consequence | 4= hejuru y'inshuro 3 |
| 43 | What age was your child when you stopped breastfeeding? | (age of child in months) |
| | Umwana wawe yari afite igihe kingana gite | (Imyaka y'umwana mu mezi) |
| | igihe wahagarikaga kumwonsa? | |
| 44 | Why did you stop breastfeeding? | 1= Not enough milk |
| | Kuki wahagaritse konsa umwana wawe? | 1= Amashereka adahagije |
| | | 2= Not enough time |
| | | 2=Umwanya udahagije |
| | | 3= Maternal illness |
| | | 3=Uburwayi bw'umubyeyi |
| | | 4= Infant illness |
| | | 4= Uburwayi bw'umwana 5= Child not satisfied by breastmilk |
| | | alone |
| | | 5= Umwana ntiyahazwaga |
| | | n'amashereka gusa |
| | | 6= Other |
| | | 6=Ibindi |
| 45 | Have you introduced complementary | Y [PROCEED TO QUESTION 49] |
| 43 | feeding to your child who is 6 to 24 | Yego [KOMEZA KU KIBAZO CYA 49] |
| | months? | N [SKIP TO QUESTION 57] |
| | Ese watangiye guha umwana wawe | Oya [SIMBUKA UJYE KU KIBAZO CYA |
| | imfashabere uri hagati y'amezi 6 na 24? | 57] |
| 46 | At which age of your child did you introduce | (child's age in months) |
| | complementary feeding to your child? | (Imyaka y'umwana mu mezi) |
| | Ese watangiye guha umwana wawe imfashabere afite ikihe kigero? | |
| 47 | 24- hour recall | |
| 41 | THE FOLLOWING QUESTIONS WILL BE | |
| | ASKED TO DETERMINE HOW OFTEN AND | |
| | WHAT THE CHILD 6 TO 24 MONTHS ATE IN | |
| | THE LAST 24 HOURS | |
| | Kwibuka ibyo umwana yariye mu masaha | |
| | 24 ashize | |
| | IBIBAZO BIKURIKIRA BIZABAZWA MU RWEGO RWO KUMENYA INSHURO NDETSE | |
| | N'IBYO UMWANA URI HAGATI Y'AMEZI 6 NA | |
| | 24 YARIYE MU MASAHA 24 ASHIZE | |
| 48 | Was yesterday a normal day of eating for | 1= Yes (Skip to Question 53) |
| | [child's name] | 1= Yego (simbuka ujye ku kibazo cya |
| | Ese ejo hashize wari umunsi usanzwe wo | 52) |
| | kurya kuri [izina ry'umwana]? | 2= No (continue to question 51) |
| | | 2= Oya (komeza ku kibazo cya 51) |
| | | 3= I don't know (continue to question 51) |
| | | 3= Simbizi (komeza ku kibazo cya |
| | | 51) |
| 49 | Describe why yesterday was not a normal | |
| Ì | day of eating for [child's name]. What was | |



| | INTERNATIONAL | |
|----|---|---|
| 50 | different from what [child's name] normally eats and drinks? Sobanura impamvu ejo hashize [izina ry'umwana] atariye mu buryo busanzwe. Ni iki cyari gitandukanye ugereranyije n'ibyo [izina ry'umwana] asanzwe arya ndetse ananywa? When was the last typical day of eating for [child's name]? Ni ryari [izina ry'umwana] aheruka kurya | (How many days prior to day of interview) (Ni iminsi ingahe ishize umwana |
| | mu buryo busanzwe? | aheruka kurya mu buryo busanzwe uhereye ku munsi wabereyeho ikiganiro)? |
| 51 | How often did you feed your child yesterday during the day and night?? Ni inshuro zingahe wagaburiye umwana wawe umunsi w'ejo hashize haba ku manywa na nijoro? WE WANT TO FIND OUT HOW MANY TIMES THE CHILD ATE ENOUGH TO BE FULL. SMALL SNACKS AND SMALL FEEDS SUCH AS ONE OR TWO BITES OF MOTHER'S OR SISTER'S FOOD SHOULD NOT BE COUNTED. TURIFUZA KUMENYA INSHURO ZOSE UMWANA YARIYE KUGIRANGO AHAGE. NTABWO TURI BUBARE YA MAFUNGURO MATO NO GUHABWA UTURYO DUKE DUKE, URUGERO NK'IYO UMUBYEYI W'UMUGORE CYANGWA MUKURU W'UMWANA AMUHAYE KU BIRYO BYE. LIQUIDS DO NOT COUNT FOR THIS QUESTION. DO NOT INCLUDE THIN SOUPS OR BROTH, WATERY GRUELS, OR ANY OTHER LIQUID. NTABWO IBINYOBWA BIRI BUBARWE KURI IKI KIBAZO. NTIWONGEREMO ISUPU, IBIRYO BYOROSHYE CYANE BIGIYE KUMERA NK'AMAZI, CYANGWA IBINDI BINYOBWA. USE PROBING QUESTIONS TO HELP THE RESPONDENT REMEMBER ALL THE TIMES THE CHILD ATE YESTERDAY KORESHA IBIBAZO BISOBANUZA KUGIRANGO UFASHE USUBIZA KWIBUKA INSHURO ZOSE UMWANA YARIYE UMUNSI W'EJO HASHIZE | 1= <2 times 1= < Inshuro 2 2= 2-3 times 2= hagati y'inshuro 2 na 3 3= 3-5 times 3= hagati y'inshuro 4 na 5 4= 6+ times 4= Inshuro 6 no hejuro yazo (6+) |
| 52 | When do you usually feed your child? Ni ryari mu busanzwe ugaburira umwana | 1= At scheduled times 1= Igihe cyateganyijwe |
| | wawe? | 2= When family is eating 2= Igihe umuryango uri kurya 3= Anytime the child gives a cue |



| | INTERNATIONAL | |
|----|--------------------------------------|--|
| | | 3= Igihe cyose umwana yerekanye |
| | | ibimenyetso by'uko ashonje |
| | | 4= Other (specify) |
| | | 4= Ibindi (Sobanura) |
| 53 | Tick which foods you fed your child | Grains, roots, tubers |
| | yesterday during the day or night. | Ibinyameke,ibinyabijumba, |
| | Hitamo ibiryo wagaburiye umwana wawe | ibinyamafufu |
| | umunsi w'ejo hashize haba ku manywa | Legumes, nuts |
| | cyangwa nijoro. | Ibinyamisogwe n'ibinyabunyobwa |
| | | Diary products (milk, yogurt, cheese) |
| | | Ibikomoka ku mata (amata, |
| | | yawurute, foromaji) |
| | | Flesh foods (meat, fish, poultry, liver/ |
| | | organ meats) |
| | | Inyama (inyama y'inka, amafi, |
| | | inkoko, umwijima/ inyama zo mu |
| | | nda) |
| | | Eggs |
| | | Amagi |
| | | Vit A rich fruits and vegetables |
| | | Imbuto n'imboga bikungahaye kuri |
| | | vitamini A |
| | | Other fruits and vegetables |
| | | Izindi mbuto n'imboga |
| | | Fruit juice, water |
| | | Umutobe ukozwe mu mbuto, amazi |
| | | Any commercially available fortified |
| | | infant and young child food (e.g.) |
| | | Ibindi biryo by'abana bato ibyo ari |
| | | byose byongerewemo intungamubiri |
| | | biboneka ku masoko (Urugero) |
| | | Any other porridge |
| | | Ikindi gikoma icyo ari cyo cyose |
| | | Tea, Coffee |
| | | Icyayi, ikawa |
| 54 | Who feeds your child? | 1= Caregiver |
| | Ni nde ugaburira umwana wawe? | 1= Uwita ku mwana |
| | | 2=Mother |
| | | 2= Umubyeyi w'umugore |
| | | 3= Father |
| | | 3= Umubyeyi w'umugabo |
| | | 4= The child |
| | | 4= Umwana |
| | | 5= Others (specify) |
| | | 5= Ibindi (Sobanura) |
| 55 | Why haven't you introduced | 1= Child is not of age |
| | complementary feeding? | 1= Umwana ntabwo aruzuza imyaka |
| | Kuber'iki utaratangira guha umwana | 2= Breast milk alone is sufficient |
| | imfashabere? | 2= Amashereka yonyine arahagije |
| | | 3= Inadequate funds |
| | | 3= Ubushobozi budahagije |
| | | 4= Forgot to provide CF |
| | | 4= Kwibagirwa guha umwana |
| | | imfashabere |
| | | 5= Other (specify) |



| | 5= Ibindi (Sobanuza) |
|--|----------------------|
| | |



Gikuriro SBCC Innovations

FGD GUIDE

<u>Objective:</u> The objective of the FGD is to gain insights from parents of children under two regarding the acceptability, appropriateness and feasibility of the nudge prototype they are using.

<u>Intego:</u> Intego y'ikiganiro mu itsinda ni ugukusanya ibitekerezo bivuye mu babyeyi bafite abana bari munsi y'imyaka 2, bijyanye n'uko bakiriye, ndetse n'uburyo bakoresheje ishushongero bahawe niba bwari buboroheye.

<u>Intro and Informed Consent:</u> Inform participants of the following: the objective of discussion; that participation is voluntary; and information will not be used to single out or damage any individual.

<u>Kwibwirana no Gutanga uburenganzira bwo kugira uruhare mu kiganiro:</u> Menyesha abitabiriye ikiganiro ibi bikurikira: Intego y'ikiganiro; ko kwitabira ari ubushake bwabo; kandi ko tutazakoresha amakuru mu guha akato cyangwa kwangiza umuntu uwo ari we wese.

<u>Definitions:</u> For better understanding of discussion topics, the following terms may need to be explained at the appropriate points in the FGD.

<u>Ubusobanuro:</u> Kugira ngo twumve neza ingingo z' ikiganiro, tangira usobanura neza amagambo akurikira kuri buri ngingo ku kiganiro mu itsinda.

| Complementary Feeding Imfashabere | Solid, semi- solid and soft foods that are introduced to a child from 6 months of age in addition to breastfeeding Ibiryo bikomeye, bidakomeye kandi bitanoroshye n'ibyoroshye bitangira guhabwa umwana ufite kuva ku mezi 6 byiyongera ku mashereka. | | |
|---|---|--|--|
| Meal Frequency | This term means the number of times a child received solid, semi-solid or | | |
| Inshuro zo | soft foods or milk feeds in a day | | |
| gufata | Iri jambo risobanuye umubare w' inshuro umwana agaburirwa ibiryo | | |
| amafunguro | bikomeye, bidakomeye kandi bitanoroshye cyangwa byoroshye cyangwa | | |
| | ahabwa amata ku munsi. | | |
| Diet Diversity | This term refers to meals for children that contain four or more food groups | | |
| Kunyuranya | Iri jambo risobanura amafunguro abana bahabwa agizwe n'ubwoko bune | | |
| Indyo | cyangwa burenga bw'ibiribwa. | | |
| Food Groups | 1)Grains, roots and tubers (Ibinyampeke, ibinyabijumba cyangwa | | |
| Ubwoko | ibinyamafufu); 2) Legumes and nuts (Ibinyamisogwe n'ibinyabunyobwa); | | |
| bw'ibiribwa | 3) Dairy products (milk, yogurt, cheese) (Ibikomoka ku mata (amata, | | |
| | yawurute, foromaji)); | | |
| | 4) Flesh foods (meat, fish, poultry and liver/ organ meats) (Inyama (inyama | | |
| | y'inka, amafi, inkoko n'umwijima/ inyama zo mu nda)); | | |
| | 5) Eggs (Amagi); | | |
| | 6) Vitamin A rich fruits and vegetables (Imbuto n'imboga bikungahaye kuri | | |
| | vitamini A); and | | |
| | 7) Other fruits and vegetables (Izindi mbuto n'imboga) | | |

Methodology: The FGD should last 60 minutes (max) and time

<u>Uburyo</u> bw'ibaza: Ikiganiro mu itsinda kigomba kutarenza iminota 60(igihe kirekire) kandi igihe kigomba kugenzurwa hakajyamo akanya ko kuruhuka nyuma yo gusobanura buri shushongero.



<u>Data Capture</u>: As with all primary research, it will be critical to take good notes and capture important information and quotations as possible. Use notebooks for note taking and utilize audio recording after receiving consent to record.

<u>Uko amakuru y'ingenzi afatwa:</u> Nk' ubundi bushakashatsi bwose bw'ibanze, bizaba byiza mu gufata amakuru mu buryo bwiza no gukusanya amakuru y'ingenzi ndetse n'imigani uko bishoboka. Koresha igitabo cyandikwamo kugirango wandikemo amakuru ndetse ukoreshe akuma gafata amajwi nyuma yo guhabwa uburenganzira bwo gufata amajwi.

FGD Protocol for Parent and Caregiver Participants: Oral Consent Form

Amabwiriza y'ikiganiro mu itsinda ku bitabiriye ikiganiro b'ababyeyi n'abita ku bana: Gutanga uburenganzira mu mvugo bwo kwemera kugira uruhare mu kiganiro.

Thank you for taking the time to meet with us today. My name is ______ and my colleagues' name(s) is/are _____. We are from Three Stones. Together with CRS Gikuriro program, we are gathering information and views of parents and caregivers on innovative tools that may help you to adopt and maintain optimal infant and young child feeding practices. With this information we will be able to better understand which innovative tools and materials could be further developed within Gikuriro for parents to use to help them to remember to feed children 6 – 23 months old complementary foods at least three (3) times a day and a diverse diet.

Mwakoze kuduha umwanya wanyu. Amazina yanjye ni _______n'aya mugenzi wanjye/bagenzi banjye ni______. Duturuka mu kigo kitwa Three Stones. Twese hamwe, turi gushaka amakuru n'ibitekerezo by'ababyeyi n'abita ku bana ku bijyanye n'amashushongero ashobora kubafasha kugirango bashyire mu bikorwa ibikorwa byo kugaburira impinja n'abana bato. Hamwe n'aya makuru tuzabasha kumenya ishushongero n'ibikoresho bizokorerwa irindi suzumwa kugirango bikoreshwe n'ababyeyi mu kubibutsa kugaburira abana bari hagati y'amazi 6 – 23 imfashabere nibura inshuro 3 ku munsi no kuyuranya indyo.

All of you have been asked to participate in this discussion because you are currently using the prototype and your knowledge, views, and experience as parents and community members are valuable and important to us. Your opinions and ideas will guide us in the further development of tools designed to best help you and your families live a healthy life.

Mwese murasabwa kugira uruhare mu kiganiro kubera ko muri gukoresha ishushongero/igikoresho kandi ibitekerezo n'ubunararibonye bwanyu nk'ababyeyi n'abanyamuryango ni iby'agaciro kandi ni ingirakamaro kuri twe. Ibitekerezo byanyu bizatuyobora mu ikorwa ry'ibikoresho bigenewe kubafasha mwe n'imiryango yanyu kubaho mu buzima buzira umuze.

Before we begin, I want to let you know that any information or examples we gather during this discussion will not be attributed to any participant, and will remain anonymous. You are not obligated to respond to any of our questions and can stop the interview at any time. However, we hope you will participate in this discussion since your views are important.

Mbere yuko dutangira, ndifuza kubamenyesha ko amakuru ayo ari yo yose cyangwa ingero turi bukusanye muri iki kiganiro bitazitirirwa uwitabiriye ikiganiro uwo ari we wese kandi bizaguma ari



ibanga. Ntabwo utegetswe gusubiza ku kibazo icyo ari cyo cyose mu bibazo byacu kandi ushobora guhagarika ikiganiro igihe icyo ari cyo cyose. Rero, turizera ko muri bugire uruhare mu kiganiro kuko ibitekerezo byanyu ari ingenzi.

| Our discussion will take no more than 60 minutes and will be followed by a brief questionnaire |
|---|
| Ikiganiro cyacu ntabwo kiri burenze iminota 60. |
| |
| Do you have any questions about this discussion? |
| Hari ikibazo icyo ari cyo cyose mufite kuri iki kiganiro? |
| Do we have your permission to begin? Do we have permission to record this interview? |
| Mwaba muduhaye uburenganzira/uruhushya rwo gutangira? Mwaba muduhaye uruhushya/uburenganzira bwo gufata amajwi y'iki kiganiro? |
| [] Consent provided [Interviewer/Recorder initials] |
| [] Uburenganzira buratanzwe [Ubaza/Ufata amajwi] |
| |



Parents/ Caregivers: FGD Questions

Ababyeyi/Abita ku bana: Ibibazo by'ikiganiro mu itsinda

Women Men

Abagore Abagabo

(Circle one)

(Hitamo kimwe)

| Demographic Information | | |
|---------------------------------|--|--|
| Date and Start Time | | |
| Itariki n'igihe cyo gutangira | | |
| District/ Sector/ Cell/ Village | | |
| Akarere/Umurenge/ | | |
| Akagari/Umudugudu | | |
| Number of Participants | | |
| Umubare w'abitabiriye | | |
| ikiganiro | | |
| Facilitator/ Note Taker | | |
| Uyobora ikiganiro/Uwandika | | |

Part 1: Opening Questions to be asked only the first time you are meeting with new FGD participants

Igice cya 1: Ibibazo bibazwa gusa ku nshuro ya mbere abayoboye ikiganiro bahura n'abacyitabiriye.

- 1. How would you describe complementary feeding? Ni gute wasobanura imfashabere?
- 2. At how many months old would you begin to feed your child food other than breast milk? (Probing questions: At what age do you feel you should start complementary feeding? When do you actually start? Why do you start at that time?)

Ni ku mezi angahe watangira guha umwana wawe ibiryo bindi bitari amashereka? (Ibibazo bisobanuza: Ni ku kihe kigero (mu mezi) wumva ukwiye gutangira guha umwana wawe imfashabere? Ni ryari mu busanzwe mutangira kuyibaha? Kubera iki mutangira kuri icyo gihe?)

3. How old is your child? AND How often do you feed your child complementary foods per day?

Ese umwana wawe afite imyaka ingahe? Ni inshuro zingahe uha umwana wawe imfashabere ku munsi?

4. What prevents you from feeding your child complementary foods all required times each day in addition to breastfeeding?

Ni ibiki bikubuza guha umwana wawe imfashabere yiyongera ku mashereka inshuro zose zikenewe buri munsi?



5. Who else can provide a complementary food when you are not home/around? If yes, how does he or she know what to give to the child?

Ninde wundi ushobora guha umwana imfashabere igihe udahari? Niba ahari, ni gute amenya icyo agomba guha umwana?

Part 2: Nudge Prototype Acceptability, Appropriateness and Feasibility
Igice cya 2: Kwakirwa no gukoreshwa mu buryo bworoshye kandi bukwiye kw'ishushongero

Acceptability: Whether beneficiaries found the nudge prototype likeable, agreeable or satisfactory and addressed their needs

Uburyo yakiriwemo: Niba abafatanyabikorwa barakunze, barayemeye cyangwa baranyuzwe n'ishushongero ndetse ikabafasha gusubiza ibyifuzo byabo.

- 1. Is this tool something new for you to see or use in your home or community?

 Ese ni ubwa mbere mubonye cyangwa mukoresheje iki gikoresho mu rugo iwanyu cyangwa aho mutuye?
- 2. What is the first thing about the images and tool that caught your attention? Probe: How did it catch your attention?
 - Ese ni ikihe kintu cya mbere muhita mutekereza iyo mubonye amashusho ari kuri iki gikoresho ndetse n'iki gikoresho ubwacyo? Sobanuza: Ni gute icyo kintu cyatumye ugitekerezaho cyane?
- 3. Do you like the way this image and/ or tool looks or is designed? Probe: What do you like the most about it?
 - Ese wakunze uburyo iyi shushongero (igikoresho) igaragara cyangwa ikozwe? Sobanuza: Ni iki wakunze cyane kuri yo?
- 4. Are there any features or images that seem unclear to you or need more explanation? Ese hari ibintu cyangwa amashusho ari kuri iyi shushongero wumva udasobanukiwe cyangwa ukeneyeho ubundi busobanuro?
- 5. Who do you think would use this tool? Probe: How are these people different from you? Ni nde utekereza ukwiye gukoresha iki gikoresho? Sobanuza: Ni gute aba bantu batandukanye nawe?
- 6. What do you think this picture and tool is asking or reminding you to do?

Ese utekereza ko ari iki iyi shushongero (igikoresho) yaba iri kugusaba cyangwa kukwibutsa gukora?

- 7. Did this picture and tool help you to do what it is asking or reminding you to do? Ese aya mashusho n'iki gikoresho ubwacyo, byaba byaragufashije kwibuka cyangwa byaragusabye kugira icyo ukora?
- 8. According to you, is there any new information you have learned from this tool?



Uko mubitekereza, haba hari andi makuru mashya mwungutse kuri iki gikoresho?

Appropriateness: The perceived fit, relevance or compatibility of the nudge prototype for the beneficiaries in rural or urban settings; and/ or perceived fit of the innovation to remind or nudge beneficiary complementary feeding practices for MF and DD

Uko ishushongero/igikoresho ikoreshwa mu buryo bukwiriye: uko ishushongero (igikoresho) iteye, ikozwe mu buryo bukwiye, bukwiranye n'abafatanyabikorwa batuye mu byaro cyangwa mu mijyi, cyangwa niba uko ishushongero/igikoresho ikozwe bijyanye no kwibutsa umufatanyabikorwa guha umwana imfashabere harimo inshuro zo kubagaburira no kumuha ubwoko bw'ibiribwa butandukanye.

- 9. Is there anything about the picture and/or tool that you found offensive or annoying, either to your culture, beliefs, way of living, or in any other way?
 Ese kuri iki gishushanyo (igikoresho) haba hari ikintu kibi cyangwa kibangamiye haba: ku muco, ku myizerere yanyu, uburyo mubayeho cyangwa mu bundi buryo ubwo ari bwo bwose?
- 10. Was this tool useful to you in helping you to feed your child a diverse diet? (state context in which the tool was to be used-household, in community, etc.) Probe: How did it help you in that context?
 Ese iki gikoresho cyabafashije kugaburira abana abana indyo inyuranye? (Erekana uburyo iki gikoresho cyakoreshejwe mu rugo, mu muryango, etc) Sobanuza: Ni gute
- 11. Was this tool useful to you in helping you to feed your child at least twice during the day or night? Probe: How did it help you in that context?
 - Ese iki gikoresho cyabafashije kugaburira abana banyu nibura inshuro 2 ku munsi haba ku manywa cyangwa nijoro? <u>Sobanuza:</u> Ni gute cyabafashije muri ubwo buryo?
- 12. Did this tool motivate your husband or wife to support you to feed your child a diverse diet or at least twice during the day or night? Probe: How did this tool remind your husband or wife to support you?

Ese iki gikoresho cyaba cyarashishikarije abagabo cyangwa abagore banyu kubafasha kugaburira abana banyu indyo inyuranye nibura inshuro ebyiri ku munsi haba ku manywa cyangwa nijoro? Sobanuza: Ese ni gute iki gikoresho cyibukije abagabo cyangwa abagore banyu kubafasha?

| 13. Considering the context for use as mentioned above, what would you suggest to | o make |
|--|--------|
| this tool even more useful or attractive for you to use? | |
| Ugendeye ku byavuzwe haruguru, ni ibihe bitekerezo watanga kugirango iki gik kigire umumaro kurushaho cyangwa kikubere cyiza mu kugikoresha? | oresho |
| The arrange of a region of a region of the r | |

- 14. Did you talk to anyone else about using this nudge? _____ (Yes/No) Ese hari undi umuntu uwo ari we wese waba waraganirije ku bijyanye n'imikoreshereze y'iyi shushongero? —— (Yego/Oya)
 - a. If NO: Skip to question 15Niba ari Oya: Simbuka ujye ku kibazo cya 15

cyabafashije muri ubwo buryo?

b. If YES: Who did you talk to about using this nudge? Probe: What were their reactions to the tool? Probe for if they were positive or negative, if they helped encourage or discourage the caregiver to try it.



Niba ari Yego: Ni nde waganirije ibijyanye n'imikoreshereze y'iki gikoresho? <u>Sobanuza</u>: Ese wabonye yakiriye ate ibijyanye n'iki gikoresho? Sobanuza kugirango umenye niba barabyakiriye neza cyangwa nabi, niba barashishikarije cyangwa baraciye intege uwita ku mwana ku bijyanye no kugerageza iki gikoresho.

Feasibility: Extent to which the nudge prototype is perceived to be easily and conveniently done, or successfully used within the given setting

Uburyo bushoboka bwo gukoresha iyi shushongero: Ikigero iyi shushongero ishobora gukoreshwamo mu buryo bworoshye kandi bukwiriye cyangwa yarakoreshejwe neza ahabugenewe.

| 15. W | ere you easily able to use this new nudge? (Yes/No) |
|-------|--|
| Es | e mwashoboye gukoresha iyi shushongero/igikoresho mu buryo buboroheye? —— |
| (Y | ego/Oya) |
| a. | If YES: What made it easy for or helped you to use it? |
| | Niba ari YEGO: Ni iki cyatumye iborohera cyangwa cyabafashije kuyikoresha? |

- b. If NO: What made it hard for you to try using this nudge?Niba ari OYA: Ni iki cyatumye ibakomerera mukuyikoresha?
- 16. Do you plan to keep using this nudge after our visit today? _____ (Yes/No) Ese muzakomeza gukoresha iyi shushongero/igikoresho nyuma y'uko tubasuye uyu munsi?
 - a. If YES: Why do you plan to keep using this nudge?Niba ari YEGO: Ni ukubera iki muteganya gukomeza gukoresha iyi shushongero?
 - b. If NO: Could you tell me more about why you will not keep using this nudge? Niba ari OYA: Ese mushobora kudusobanurira birambuye impamvu mutazakomeza gukoresha iyi shushongero?
 - c. If NO (Caregiver/mother did NOT use the nudge): Could you tell me about why you did not use this nudge? I'd like to understand what may have kept you from using it. (Probe for as many reasons as the participant can provide. Make sure you understand why they didn't use it.)

Niba ari OYA (Uwita ku mwana/Umubyeyi w'umugore ntiyakoresheje ishushongero): Ese ushobora kunsobanurira birambuye impamvu utakoresheje iyi shushongero? Ndifuza gusobanukirwa n'icyatumye udakoresha iki gikoresho. (Sobanuza kugirango umenye impamvu zose zishoboka usubiza atanga. Menya neza ko wumva impamvu atakoresheje iki gikoresho)

Conclusion of discussion:

Umwanzuro w'ikiganiro

- ✓ Remind participants that their views will remain anonymous
- ✓ Ibutsa abitabiriye ikiganiro ko ibitekerezo byabo bizaguma ari ibanga.
- ✓ Thank them for their valuable input and for participating in the discussion
- ✓ Bashimire ku bw'ibitekerezo byabo by'agaciro ndetse no kugira uruhare mu kiganiro.

Gikuriro SBCC Innovations

Observation Checklist



Urutonde ngenderwaho mu igenzura ry'ibyakozwe

| Date of Observation | on | (DD/ N | IIM/ YY) | |
|------------------------|-----------------------------|---------|----------|--------------------------------|
| Itariki yo kujya kur | eba uko ibintu byakozwe | (Umun | si/ Ukwe | ezi/ Umwaka) |
| Mother/ Caregiver | 's Code |] |] | |
| Nimero iranga um | ubyeyi w'Umugore/Uwita ku | mwana | 1 | |
| Coordinator Code | | [|] | |
| Nimero iranga Uba | aza | | | |
| Nudge Prototype | | 1= Wa | II Clock | 2= Feeding Chart |
| Ishushongero umwana | 1= Isaha yo gushyira ku ruk | kuta 2= | shusho | ngero igaragaza uko wagaburira |

| Setting | and Use | | |
|------------------|---|---|---|
| Jburyo | bwo kubishyira aho byagenewe no kubikoresha | | |
| 1. | Is the innovation used or set up in the designated setting or during the designated activity/ routine (e.g. Is clock/ feeding chart affixed to the wall?) Ese iyo shushongero irakoreshwa cyangwa iri aho yagenewe kuba (Urugero Ese iyo saha/ ishushongero igaragaza uko wagaburira umwana imanitse ku rukuta?) | Y | N |
| 2. | Is the innovation working properly? | Υ | N |
| | Ese iyo shushongero ikora neza? | | |
| Accept Jburyc | byakiriwe | | |
| 3. | Is the innovation being used? Ese iyi shushongero irakoreshwa? | Y | N |
| 4. | Is the alarm set to the appropriate frequency for the Wall Clock? OR Are the Feeding chart food group sliders being used? Ese iyi nzogera yibutsa (alarm) y'isaha yo ku rukuta ikozwe ku buryo ikomeza kubibutsa inshuro zikwiye? CYANGWA, Ese aho ho gusunika hajyanye n'ubwoko bw'ibiribwa harakoreshwa kuri iyi shushongero igaragaza uko wagaburira umwana? | Υ | N |
| \pprop | riateness | | |
| Uburyo | bukoreshwa niba bukwiye | | |
| 5. | Have you observed the mother/ father/ caregiver prepare a meal for their child? Ese wigeze witegereza umubyeyi w'umugore/umubyeyi w'umugabo/uwita ku mwana ari gutegura ifunguro ry'umwana we? | Y | N |



| 6. | If yes, is the innovation playing a role for mother/ caregiver/ father to remember to feed child a diverse diet? Niba ari byo, ese hari uruhare iyi shushongero yaba ifite mu kwibutsa umubyeyi w'umugore/umubyeyi w'umugabo/uwita ku mwana kugaburira | Y | N |
|------------------|--|---|---|
| 7. | If yes, is the innovation playing a role for mother/ caregiver/ father to remember to feed the child at the appropriate times and frequency? Niba ari byo, ese hari uruhare iyi shushongero yaba ifite mu kwibutsa umubyeyi w'umugore/umubyeyi w'umugabo/uwita ku mwana kugaburira umwana mu gihe gikwiye ndetse n'inshuro zikwiye? | Y | N |
| 8. | Is the innovation being used by the intended beneficiary? Mother/ father/ caregiver? Ese iyo shushongero ikoreshwa n'abantu babigenewe? umubyeyi w'umugore/umubyeyi w'umugabo/uwita ku mwana | Y | N |
| Feasib Uburyo | ility bworoshye kandi bushoboka bwo kuyikoresha | | |
| 9. | Is the participant easily using the innovation? Ese biramworohera gukoresha iyo shushongero? | Y | N |
| 10 | . Is the innovation convenient for the participant to use? Ese iyo shushongero inogeye uwo muntu mu buryo ayikoresha? | Y | N |

ASK THESE QUESTIONS TO THE PARTICIPANT AFTER OBSERVATION

BAZA IBI BIBAZO KU BANTU BITABIRIYE NYUMA YO KUREBA

- 1. Are you able to easily use this innovation? Y/N (If answer is Yes, go to Question 3) Ese mushoboye gukoresha iyi shushongero mu buryo bworoshye? Yego/Oya (Niba igisubizo ari Yego, jya ku kibazo cya 3)
- 2. If No: What prevented you from using this innovation
 - a. Time
 - b. Forgot
 - c. Not interested
 - d. Other (specify)

Niba igisubizo ari Oya: Ni iki cyakubujije gukoresha iyi shushongero/igikoresho?

- a. Umwanya
- b. Kwibagirwa
- c. Kutabyitaho
- d. Ibindi (Sobanura)
- 3. Did this innovation tool help you to feed your child at least 4 different food groups in the last day or night? Y/N (If Yes, go to Question 5)
 Ese iyi shushongero/igikoresho yagufashije kugaburira umwana wawe nibura ubwoko 4 butandukanye bw'ibiribwa ejo hashize haba ku manywa cyangwa nijoro? Yego/Oya (Niba igisubizo ari Yego, jya ku kibazo cya 5)
- 4. If no, what prevented you from feeding your child at least 4 different food groups in the last day or night?
 - a. Time
 - b. Forgot
 - c. Money
 - d. Other (specify)



Niba igisubizo ari Oya, ni iki cyakubujije kugaburira umwana wawe nibura ubwoko 4 butandukanye bw'ibiribwa ejo hashize haba ku manywa cyangwa nijoro?

- a. Umwanya
- b. Kwibagirwa
- c. Kutabyitaho
- d. Ibindi (Sobanura)
- 5. Did this innovation tool help you to feed your child at least 2 times in the last day or night in addition to breastfeeding? (If Yes, complete questionnaire)
 Ese iyi shushongero/igikoresho yagufashije kugaburira umwana wawe nibura inshuro 2 ejo hashize haba ku manywa cyangwa nijoro byiyongera ku mashereka? (Niba igisubizo ari Yego, Ibibazo birarangiye)
- 6. If no, what prevented you from feeding your child at least 2 times in the last day or night in addition to breastfeeding?
 - a. Time
 - b. Forgot
 - c. Money
 - d. Other (specify)

Niba igisubizo ari Oya, ni iki cyakubujije kugaburira umwana wawe nibura inshuro 2 ejo hashize haba ku manywa cyangwa nijoro byiyongera ku mashereka?

- a. Umwanya
- b. Kwibagirwa
- c. Kutabyitaho
- d. Ibindi (Sobanura)



Gikuriro SBCC Innovations Participant Self- Report Kwisuzuma

Acceptability of Innovation Measure (AIM), Innovation Appropriateness Measure (IAM), and Feasibility of Innovation Measure (FIM)

Igipimo cy'uburyo ishushongero yakiriwe, Igipimo cy'uburyo ishushongero ikoreshwa mu buryo bukwiye, Igipimo cy'uburyo ishushongero ishobora gukoreshwa mu buryo bworoshye kandi bushoboka

INSTRUCTIONS: Ask each participant to fill in the below questionnaire with a indicating their response to each question. This questionnaire can either be administered by self-report or verbally to each individual and completed by the enumerator.

Amabwiriza: Saba buri muntu witabiriye kuzuza ibibazo biri munsi akoresheje akamenyetso kerekana igisubizo cye kuri buri kibazo. Ibi bibazo bishobora kuzuzwa nawe ubwe cyangwa buri umwe akajya abibwira ubaza maze ubaza akabyuzuza.

Acceptability of Innovation Measure (AIM)

Igipimo cy'uburyo ishushongero yakiriwe

| | | Completely disagree Simbyemera na gato | Disagree Simbyemera | Neither agree nor disagree Simbyemera kandi simbihakana | Agree Ndabyemera | Completely agree Ndabyemera cyane |
|----|---|--|------------------------|---|---------------------|-----------------------------------|
| 1. | (INSERT INNOVATION) meets my approval. (SHYIRAMO ISHUSHONGERO) yujuje ibyo nifuza | • | 2 | 3 | 4 | ⑤ |
| 2. | (INSERT INNOVATION) is appealing to me. (SHYIRAMO ISHUSHONGERO) iranshishikaza | • | ② | 3 | 4 | ⑤ |



| 3. I like (INSERT INNOVATION). Nakunze iyi (SHYIRAMO ISHUSHONGERO) | • | ② | 3 | • | (5) |
|---|---|----------|---|---|-----|
| 4. I welcome (INSERT INNOVATION). Nishimiye iyi (SHYIRAMO ISHUSHONGERO) | • | ② | 3 | • | (S) |

Innovation Appropriateness Measure (IAM)

Igipimo cy'uburyo ishushongero ikoreshwa mu buryo bukwiye

| | Completely disagree Simbyemera na gato | Disagree Simbyemera | Neither agree nor disagree Simbyemera kandi simbihakana | Agree Ndabyemera | Completely agree Ndabyemera cyane |
|--|--|------------------------|---|---------------------|-----------------------------------|
| 1. (INSERT INNOVATION) seems useful. (SHYIRAMO ISHUSHONGERO) isa nkaho ari ingirakamaro | • | 2 | 3 | 4 | (S) |
| 2. (INSERT INNOVATION) seems suitable to my needs. (SHYIRAMO ISHUSHONGERO) isa nkaho ijyanye n'ibyifuzo byanjye. | • | ② | 3 | • | ⑤ |



| 3. (INSERT INNOVATION) seems to be made specifically for me. (SHYIRAMO ISHUSHONGERO) isa nkaho yakorewe njyewe by'umwihariko. | • | ② | 3 | • | ⑤ |
|---|---|----------|---|----------|----------|
| 4. (INSERT INNOVATION) seems able to motivate me. (SHYIRAMO ISHUSHONGERO) isa nkaho ishoboye kunshishikaza. | • | ② | 3 | 4 | ⑤ |

Feasibility of Innovation Measure (FIM)

Igipimo cy'uburyo ishushongero ishobora gukoreshwa mu buryo bworoshye kandi bushoboka

| | Completely disagree Simbyemera na gato | Disagree Simbyemera | Neither agree nor disagree Simbyemera kandi simbihakana | Agree Ndabyemera | Completely agree Ndabyemera cyane |
|---|---|------------------------|---|---------------------|--|
| | | | (<u>•</u> • | | |
| 1. (INSERT INNOVATION) seems easy to maintain (SHYIRAMO ISHUSHONGERO) isa nkaho yoroshye kuyibungabunga | • | ② | 3 | • | ⑤ |



| | | INTERNATIONA | L | | |
|--|---|--------------|---|---|----------|
| 2. (INSERT INNOVATION) seems possible to use. (SHYIRAMO ISHUSHONGERO) isa nkaho bishoboka kuyikoresha | • | ② | 3 | • | ⑤ |
| 3. (INSERT INNOVATION) seems to motivate me to feed my child enough times in a day. (SHYIRAMO ISHUSHONGERO) isa nkaho inshishikariza kugaburira umwana wanjye inshuro zihagije ku munsi. | • | ② | 3 | • | ⑤ |
| 4. (INSERT INNOVATION) Seems to motivate me to feed my child from at least 4 food groups (SHYIRAMO ISHUSHONGERO) isa nkaho inshishikariza kugaburira umwana wanjye nibura ubwoko 4 bw'ibiribwa | • | 2 | 3 | 4 | ⑤ |



Annex 2: Call for Concepts

GIKURIRO SBCC INNOVATIONS

Background:

*

Gikuriro is a 5-year (Nov 10, 2015- Nov 9, 2020) USAID-funded program focusing on behavior change, capacity building and nutrition and Water, Sanitation and Hygiene (WASH) service delivery. The program is implemented through a consortium of two international agencies: Catholic Relief Services (CRS) who is the prime, and SNV, the Netherlands Development Organization as sub-recipient. The Gikuriro program works through decentralized Government of Rwanda (GoR) systems and structures and is aligned with USAID's Multi-Sectoral Nutrition Strategy to improve nutrition to save lives, build resilience, increase economic productivity, and advance development.

In line with the National Social and Behaviour Change Communication (SBCC) strategy and to complement the existing and newly revised SBCC materials particularly on complementary feeding (CF), Catholic Relief Services (CRS) through the USAID funded <u>Gikuriro</u> project is collaborating with <u>Three Stones International</u> to develop additional evidence-based tools to promote positive behaviors.

The tools will focus on the development of nudge prototypes to support optimal complementary feeing (CF) and unique /communication materials to improve practices around minimum acceptable diet and meal frequency for children under two. Guided by CRS, Three Stones will coordinate the process which will be undertaken in a consultative manner with NECDP, RBC, RHCC and USAID to ensure alignment with national priorities.

Nutrition "Nudges" can be described as default choices or reminders that make one choice more likely than another. An example of a nutrition nudge is a "Healthy Eating Plate" guide showing optimal portions of each food group recommended for healthy meals as a nudge to include four food groups in each meal.



The Challenger

Positive mid-term evaluation results show gains in knowledge for CF practices of Gikuriro program mothers. While knowledge has been improved, optimal infant and young child feeding practices remain low. Identify sustainable and scalable solutions to improve CF practices requires unique and innovative interventions to elicit long-term behaviour change.

This call for SBCC innovations seeks to identify and test unique, affordable and sustainable solutions to improve diverse diets and meal frequency for children 6 – 23 months of age. The concept should utilize innovative nudges or reminders targeting communities, parents and caregivers of children 6 – 23 months old to contribute towards the fight against malnutrition and stunting.

Theme:

- What affordable innovate idea or tool can be used to remind communities/parents/caregivers to feed their children from 6 months old complementary foods at least two times a day in addition to breastfeeding?
- What affordable innovative idea or tool can be used to remind communities/parents/caregivers to feed their child from 6 months old a diverse diet with foods from at least four food groups each day?

Eligibility Criteria:

This call for concepts is open to individuals who have experience and understanding of the Rwandan context in relation to MIYCN. These individuals should be available and willing to work with the Three Stones team for concept development and testing, through to validation from August – October 2019

Application Process:

- Applications will be reviewed through <u>Concept Note</u>
 <u>Application</u> and/ or presentation through the In- Office Ideation
 Session
- In- Office Ideation/ Feedback session is an open session for interested applicants to meet the team at Three Stones International and raise questions, seek further understanding and assistance to refining ideas for Concept Note submission.

How to Apply

There are many ways in which you can engage Three Stones to seek more information and register your interest for this Call for Concepts:

- Send an email, WhatsApp, Social Media Message or handwritten Expression of Interest to Three Stones
- Call hotline for more information and register your interest
- 3. Attend the In-Office Ideation Session















GIKURIRO SBCC INNOVATIONS

Timeline:

| DATE | ACTIVITY | DETAILS |
|-----------------------|--|---|
| 24 July 2019 | Call for Concepts opens | Application form can be found online or shared through email or WhatsApp |
| 24 July 2019 | Hotline open for calls and WhatsApp messages | +250 783 073 007 |
| | Send WhatsApp to be included in Group | Jean Claude Gasangwa |
| 30 July 2019 | Ideation and Feedback Session | Time: 1000 - 1600 |
| | | Three Stones International Rwanda |
| | | 2" Floor, Umoja House Building/Deloitte, KN 3" Rd, Imihigo Myiza Village, Ubumwe Cell, Muhima Sector |
| | | Nyarugenge District, Kigali |
| | | C+250 783 073 007 maneon act reiner@threedoneointernational.com |
| 7 Aug 2019 | Deadline for Submission of Concept Note | Submission accepted via |
| | | Email or in person at the address above |
| 9 Aug 2019 | Announcement of 5 shortlisted candidates | Announcement will be made personally to individuals and posted on social media platforms |
| 16 Aug 2019 | Design workshop for 5 shortlisted candidates | Venue to be announced and will take place in Kigali |
| 23 Aug 2019 | Final selection of 2 finalist | Announcement will be made personally to individuals and posted on social media platforms |
| 26 Aug - 30 Sept 2019 | Internship | Selected finalists will work together with the team to further develop and refine their concept and prepare for |
| | | testing and pilot. |

Award:

For development and further refinement of original ideas and innovations for testing and scale up, two (2) finalists will be awarded the following:

- Internship opportunity with Three Stones International which involves participation in further development of concept including piloting and testing of concept
- Provision of a monthly internship stipend
- Professional development and networking with nutrition experts at the national level
- Mentorship provided by Three Stones senior nutrition and health specialists
- Entry into Three Stones database for future job opportunities
- Certificate acknowledging contribution to the Gikuriro program

Final submission:

- Final concepts will be received up until the deadline of August 7th, 2019
- Fill in the Concept Note Application form and submit via email or hand deliver to Three Stones by 5pm August 7th 2019.

Evaluation criteria:

- Concept innovation
- Development impact
- Scalability and Sustainability
- Cost effectiveness
- Utilizing locally sourced materials
- Child-friendly and safe for use by target audience
- Special consideration will be given to concepts which address cross-cutting objectives of gender equality, inclusive development and accessibility (disability, usability for marginalized, hard to reach or at-risk populations).













Annex 3: Developed Materials Specifications

a. Objective 1

| Material | Specifications | Cost (Rwf) |
|---------------|---|------------|
| Feeding Chart | Printing Size: A1 (594mm x 841mm) Printing paper: Semi- gloss sticker in color | 5,000 |
| | Wooden Frame with 3mm plywood face Frame built with sections for Food Group sliding indicators Sliding indicators painted half green and half red | 8,000 |
| | Total | 13,000 |
| Baby Clock | Black plastic round frame 25cm x 40cm Analog clock face printed in color with supplied image Digital alarm on back of clock | 18,000 |
| | 3 AA batteries | 2,000 |
| | Total | 20,000 |

b. Objective 2

| Material | Specifications | Cost (Rwf) |
|-----------------------------------|---|------------|
| Complementary Feeding Poster | Printing Size: A1 (594mm x 841mm) Printing paper: Semi- gloss banner in color | 4,5000 |
| Complementary Feeding Brochure | Printing Size: A5 (210mm x 148mm) Printing paper: 250gsm, matte in color | 1,000 |
| Compound Hygiene Poster | Printing Size: A1 (594mm x 841mm) Printing paper: Semi- gloss banner in color | 4,5000 |



Annex 4: Process for Procurement and Assembly for Nudge Prototypes

Following development of nudge prototypes, Three Stones took the steps noted below to procure and assemble nudge prototypes.

a. Feeding Chart

In order to ensure durability of the Feeding Chart it was agreed during development that a suitable wooden frame should be built to incorporate the sliding indicators and to fit the A1 poster- sized sticker. Working with local carpenters from the wood market in Gisozi, a prototype was built. Following review and testing, the wood frame was refined and tailored to fit the needs of the Feeding Chart to offer a durable prototype. Quality assurance of the wood frames was managed by TSI logistics manager, coordinators, as well as the innovator.

For the image transfer onto the wood frame, 3 print shops were identified and provided a quote for the sticker. The first selected vender was not able to provide consistent quality for the stickers and therefore another vendor was selected. A local artisan was employed for a set amount of days for fixing the stickers to the feeding charts.

b. Baby Clock

It was determined early in the development process that the innovators assessment of costs and availability of materials for the Baby Clock were unrealistic and Three Stones began to research more realistic options. The Baby Clock requirements included: 1) an analog clock with a clock-face approximately 29cm x 42xm to hold the images and messages and, 2) the ability to set at least three alarms for feeding frequency. It needed to be made from durable materials to be used in household settings.

Following an exhaustive search through Three Stones preferred vendors and in local markets, departments stores and shops, while multiple options of clocks were identified, it was determined that a clock with the required specifications was not available in Rwanda. Review of manufacturing companies and technical schools in Rwanda confirmed that the cost of manufacturing the number of clocks with alarm required was cost prohibitive. Regional search began through Three Stones contacts to determine if the clock could be found in Uganda or Kenya. No feasible option was found. Local vendors then identified trusted overseas suppliers for Three Stones to connect with and determine next steps for building the Baby Clock Prototype. As no ready-made clock was found to meet the required specifications, a new prototype was to be designed and built. Suppliers in Dubai and China were contacted to build and supply a clock meeting the size requirements, to print and insert clock- face image, and include an alarm system. Following negotiations, the supplier in China was selected. A new Baby Clock prototype with unique alarm requirements was built and took 8 weeks to complete. Seventy clocks were received in the preliminary shipment for pilot. The final Baby Clock was built with potential to set 6 different alarms. TSI has an agreement with the manufacturer to produce additional clocks in bulk at a pre-negotiated price.

The quality of the clock prototypes, inclusive of digital alarm capacity and good quality printed image, were received in good working order and made from durable black plastic. The clock requires 3 AA batteries to operate, 1 for the clock and 2 for the digital alarm.

The digital alarm can be set for up to 6 different alarms. Instructions for setting the alarm below:

- 1. Insert 3 AA batteries as indicated in the battery compartment.
- 2. Set the analog clock time by turning the clock knob in either direction
- 3. Set the LED clock time on the back to correspond with the analog time
 - a) To set the hour
 - Long press the "TIME" button for 3 seconds until the first two digits of the digital time "00:00" flickers
 - Then press "UP" to adjust the hour section, press once to increase the time
 - b) To set the minutes



- Long press the "TIME" button again after setting the hour
- The last two digits of the digital time "00:00" will flicker
- Press "UP" to adjust the minutes, pressing one time to increase slowly, or long press to increase quickly.
- Once completed, press the "TIME" button to finish the time setting

4. Setting the alarm times

- a) Set the alarm switch:
 - Long press "ALARM" button for 3 seconds, the display screen will flash "OF-1" ("OF" means the alarm is off, and "1" indicates the first alarm clock setting).
 - Press "UP" one time and the display screen will show "ON-1" which means the first alarm in now on
- b) Set the first alarm:
 - Press "ALARM" button again and the hour section will flicker
 - Press "UP" to adjust the alarm hour
 - Press "ALARM" button again and minute section flickers
 - Press "UP" button to adjust the alarm minute.
 - Then press "ALARM" button to finish the first alarm time setting.
- c) Set the other 5 alarm times:
 - After completing Alarm 1, the display screen will show "OF-2"
 - Proceed as above to set the remaining number of alarms desired
 - Once all alarms desired as set, press "ALARM"

To conserve battery life, the screen light will go out after 3 seconds, but the time and the alarm will continue to operate in the background.