



**World Relief Burundi *Ramba Kibondo*
“Live Long Child” Child Survival Project
Final Evaluation Report 2012**

Kibuye Health District, Gitega Province, Burundi
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ACRONYMS

| | |
|-------------|---|
| ANC | Antenatal Care |
| ARI | Acute Respiratory Infection |
| AS-AQ | Artesunate and Amodiaquine |
| BCC | Behavior Change Communication |
| BCG | Bacillus Calmette-Guérin vaccine against Tuberculosis |
| CG | Care Group |
| C-HIS | Community Health Information System |
| CHW | Community Health Worker |
| C-IMCI | Community-IMCI |
| COSA | HC staff management committee (<i>Comité de Santé</i>) |
| CS | Child Survival |
| CSHGP | Child Survival & Health Grants Program |
| CSP | Child Survival Project |
| DPT | Diphtheria, Pertusis and Tetanus immunization |
| EBF | Exclusive Breastfeeding |
| EPI | Expanded Program on Immunization |
| FP | Family Planning |
| GAVI | Global Alliance for Vaccines and Immunizations |
| HC | Health Center |
| HIV/AIDS | Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome |
| HN-TPO | Health Net-Transcultural Psychosocial Organization |
| IMCI | Integrated Management of Childhood Illness |
| IMR | Infant Mortality Rate |
| IPT | Intermittent Preventive Treatment |
| ITN | Insecticide Treated Net |
| KHD | Kibuye Health District |
| KPC | Knowledge, Practices and Coverage Survey |
| LLIN | Long-Lasting Insecticide Treated Net |
| LQAS | Lot Quality Assurance Sampling |
| M & E | Monitoring and Evaluation |
| MCH | Maternal Child Health |
| MICS | Multiple Indicators Cluster Survey |
| MMR | Measles, Mumps, Rubella Immunization |
| MOH | Ministry of Health |
| NGO | Non-governmental Organization |
| ORS | Oral Rehydration Solution |
| ORT | Oral Rehydration Therapy |
| PBF | Performance-based Financing |
| PD/Hearth | Positive Deviance/Hearth |
| PDI | Positive Deviance Inquiry |
| PNDS | National Health Plan (Plan National de Développement Sanitaire) |
| POU | Point-of-use Water Treatment |
| PPH | Postpartum Hemorrhage |
| PVO | Private Voluntary Organization |
| Rapid CATCH | Core Assessment Tool on Child Health |
| STI | Sexually Transmitted Infection |
| TPS | Health promotion technician (MOH Health Center staff) |

A. EXECUTIVE SUMMARY

Project Description

The *Ramba Kibondo* “Live Long Child” Child Survival Project (CSP) has been managed by World Relief (WR) Burundi in Kibuye Health District in Gitega Province since September 2007. The project’s goal was to achieve significant and sustained reductions in mortality and morbidity in children under five years of age and in women of reproductive age. WR has implemented a Community Integrated Management of Childhood Illnesses (C-IMCI) program using a Care Group Model to mobilize communities and bring about change, to disseminate health education messages, and improve referrals in a timely manner to the nearest Ministry of Health (MOH) health center. Also, the CSP identified and rehabilitated malnourished children using the Positive Deviance/Hearth (PD/Hearth) strategy.

Main Accomplishments

The Care Group Model successfully reached every beneficiary household in the Kibuye Health District. The identification and rehabilitation of malnourished children through the PD/Hearth strategy was effective. A total of 209 Care Groups with 2,853 volunteers have been involved in health education, referrals and data collection. Training of project staff at all levels of the project has contributed to significant capacity building. The Monitoring and Evaluation system provided the data necessary for decision-making. As recommended at the mid-term evaluation, community health workers (CHW), MOH health center staff health promoters (TPS), and Health Center staff management committees (COSAs) were more involved in project activities; particularly in the analysis of data and joint planning of community meetings and home visits. This strong collaboration was highlighted at all levels during individual interviews or focus groups. This has laid a solid foundation for sustainability of outcomes. It must be noted that other sectors have contributed to these accomplishments, especially MOH personnel as they have organized and implemented vaccination campaigns. Most of the recommendations made at the midterm were implemented except for those requiring significant additional funding. In addition to implementing the project in Kibuye district, project staff were actively involved with MOH at the national level, both in discussions concerning sustainability, but also in promoting policy changes. In particular, PD-Hearth has been adopted as national policy for community-based rehabilitation of mild-to-moderate undernutrition. Also, the CSP Project Manager has lobbied for community-based distribution (CBD) of malaria and diarrhea treatment, and a UNICEF grant for WR to implement Community Case Management (CCM) for malaria and diarrhea (ORS) in Kibuye started as of October 2012 (the project is developing the tools and CBD is expected to begin in April 2013). The Project Manager was a key member of designing training programs for CBD of anti-malarials and was a master trainer in other provinces where projects had the supplies to begin that component.

In the last 6 months of the project, family planning messages were incorporated into the CG volunteer activities, as the CSP received an \$80,000 Flex Fund grant to incorporate FP intervention. (Please see Annex 12, Special reports, for the Flex Fund program statement.)

Primary constraints, problems, areas for attention

Two main constraints were found: contextual and staff turn-over. Several contextual factors will hinder sustainability of this project and scale-up unless addressed. The current MOH strategy of performance-based salaries, while intending to improve performance and the quality of programs, may hinder the scale-up of this project. Currently, only one performance indicator at the community level, latrines, is used to determine performance (and thus payment) of the Health Center promoters (TPS). No other indicator, for example, access to potable water or hand-washing stations, is included. Likewise, at the district and provincial levels, there is no indicator which would encourage project coordination and monitoring. The lack of this type of indicator has translated into MOH staff not being rewarded for working with NGOs, and has even created the expectation that as the NGO is asking them to do more work, the NGO should remunerate staff. An attitude of dependency is another contextual constraint.

Post-conflict development is underway, but evidence of residual impact of the conflict remains especially in the belief that outside agencies should be providing goods to local families. This dependency mentality was especially noticeable during the mid-term evaluation in remarks made during all focus group sessions as well as at all levels of interviews, whether CG volunteers, community members or MOH staff. However, by end of project, very few individuals mentioned remuneration (“motivation”) and focused more on requests for capacity building.

Access to care and referrals to health centers have greatly increased. The MOH still has not determined whether Community Case Management (CCM) will be implemented for zinc, although zinc is available to be used in conjunction with ORS to treat diarrheal cases at the health center level. MOH rolled out CCM for malaria but only with NGO partners who have their own supply of drugs and rapid test kits. The current system for ORS distribution has decreased access: families are now referred to health centers and CG volunteers are no longer distributing packets. Even though LLIN have been distributed and coverage has improved, families who do not qualify for ANC or do not have children needing measles vaccine have not been given to treated bed-nets since 2008 when the latest mass distribution campaign occurred.

WR staff turnover has been an on-going challenge over the life of this project. This is partly due to the impact of the civil war in that there is a lack of qualified individuals for management positions, and the strong competition between NGOs for available candidates. Staff are receiving on the job training in supervision, financial management, etc. However, there does not appear to be a systematic approach to staff development. In addition, with the weakening of the Burundi franc, staff experienced a loss in purchasing power.

Conclusions and key recommendations

The project design has been effective per quantitative and qualitative data both at the midterm and final evaluations. All key indicators were met by the final evaluation and most went beyond projections made during baseline analysis. Though met, the indicators for use of latrines and availability of potable water remain the lowest.

As at midterm, the evaluation team recommends that access to potable water be added as an indicator for TPS personnel performance in the national health system. Also, project coordination and monitoring should be added to district, provincial and national performance

indicators. If the inclusion of project coordination and monitoring as MOH performance criteria is not foreseeable in the near future, NGOs will need to determine what kind of unified approach would best be implemented in partnering with MOH personnel. The evaluation team also recommends that CHWs continue to be included in data collection and especially in training and supervision meetings, so that CHWs and Care Group volunteers continue to transmit similar BCC messages. In addition, CSP staff should continue to work with MOH HIS personnel in analyzing data and coordinating program activities. WR/Burundi and other NGOs involved in child survival programs need to explore strategies to improve access to ORS packets at the *colline* level, to increase access to LLINs, and to promote zinc and anti-malarial drug management at the community level.

In order to facilitate scale-up, more health promotion technicians (TPS) will need to be trained and posted in all health centers. There is currently only one school in the nation which graduates 15 – 20 TPS per year. This cadre of health personnel is very well-suited to implementing community based activities including working with CHW, COSA and Care Group volunteers. As they are part of the MOH structure, they are in a position to integrate data collection and analysis, and provide on-going supervision to CHWs and CG volunteers. In order to bridge the personnel gap, current health promoters could receive additional training, which coupled with their field experience, would give them the background needed to become TPS.

At midterm, the evaluator recommended that income generating activities (such as cooperative gardens or small animal husbandry) be incorporated into the CSP, to discourage dependency attitudes and to encourage the on-going activities of CG volunteers. This recommendation was implemented, and appears to have been an effective response to volunteers who needed tangible benefits from their participation in the project, and to maintaining volunteer engagement.

By the end of the project, the CSP on-going activities were strengthened by training supervisors and health promoters in participatory teaching strategies and, by creating IEC materials, such as story boards or flash cards, which were used in small group settings. However, training of CSP supervisory staff has not been consistent. As supervision is a core function to the success of the CSP strategies for care groups and PD/Hearth, in-service training needs to be systematically implemented and professional development included in on-going personnel performance expectations. In addition, it was recommended at the midterm evaluation that the CSP salary structure be reviewed and aligned with other NGOs. This is underway, but the delay has apparently resulted in key personnel leaving for other positions.

The final cost of the CSP was \$2,022,293 (indirect and direct costs combined). USAID provided \$1,500,000. WR matched this amount with \$520,000 and added \$2,923 to cover direct costs. The cost per beneficiary was \$18.11. (WRA and U5 = 111,645)[WRA(49,718) and U5(24,376 (year 1) + 37,551(year 5))]

B. Overview of the Project**Table 1: Summary of Major Project Accomplishments**

| Project Objective #1: Improve Linkages between households, communities, and the formal health system | | | |
|--|---|--|---|
| Inputs | Activities | Outputs | Outcome |
| Trainers IEC materials Logistical support Supervision | <p>Mobilize communities to select Care Group volunteers.</p> <p>Train health promoters and CG volunteers in C-IMCI.</p> <p>The Project's Community Health Information System (C-HIS) integrated with the MOH Health Information System (HIS) to improve disease surveillance and the quality of local health information.</p> <p>Training (project staff and MOH staff)</p> <p>Monitoring and supervision</p> <p>Families of children under five were mobilized to participate in antenatal care, MCH weeks, EPI outreach, routine immunizations and child health services through a network of Care Group promoters and volunteers.</p> <p>Referrals and counter-referrals increased between volunteers, CHWs and health centers</p> | <p>2853 CG volunteers and 265 pastors (CSP July report) trained in C-IMCI and data collection.</p> <p>Increased collaboration between project staff and MOH district personnel in analysis of data to make timely decisions.</p> <p>CG volunteers and health promoters have participated in several MCH outreach activities.</p> <p>Health Center staff reported that antenatal and post-natal visits have increased.</p> <p>CG volunteers have referred pregnant women to the Health Center as well as ill children for care, and the number of women who deliver at Health Centers increased from 60.3% to 94.8%</p> | <p>Increase in % of mothers of children age 0-23 months who wash hands with soap at two or more appropriate times: increased from 18% to 90.6%</p> <p>Increase in % of children 0-23 months with diarrhea who are offered increased fluids increased from 32.4% to 89.6%.</p> <p>% of children 0-23 months with diarrhea who received continued or increased feeding improved from 63.4% to 99%.</p> <p>Increase in % of children 0-23 months with diarrhea who receive ORS and/or home recommended fluids (from 43.7% to 99%).</p> <p>Increase in % of children age 6-23 months fed according to a minimum of appropriate feeding practices (from 25.6% to 92.7%).</p> <p>Increase in % of children who were immediately breastfed with no prelactal feeds (from 62% to 85.4%).</p> <p>Increase in % of children who completed the Hearth program and who achieved sustained adequate (200-600 grams) or catch-up (over 700 grams) growth for at least 2 months after Hearth to 92.3%.</p> |
| Project Objective # 2: Improve availability and access to essential health commodities at the community level | | | |
| Inputs | Activities | Outputs | Outcome |
| Trainers IEC materials Logistical support Supervision | <p>C-IMCI messages to increase utilization of Long-lasting Insecticide-treated Nets (LLIN) and in-home demonstrations on how to hang nets.</p> <p>C-ICMI messages to teach mothers that fever is an indication to obtain treatment at HC level, and, how to</p> | <p>Promoters and CG volunteers have been involved in LLIN distributions. However, per quantitative and qualitative data, all households in the project area with pregnant women and children under five have not yet received LLIN because the stock was insufficient and because some families received additional bednets.</p> | <p>Increase in % of households with a child 0-23 months who own an LLIN (from 3.0% to 72.9%).</p> <p>Increase in % of children age 0-23 months who slept under an LLIN or an ITN treated within the past 6 months the previous night (from 8.0% to 69.8%).</p> <p>Increase in % of women who slept under an ITN during last pregnancy (from 32.7% to 80.2%).</p> <p>Increase in % of children age 0-23 months</p> |

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| | prepare home solution of ORS. | Over 80% of targeted households were visited by CG volunteers to teach C-IMCI messages. | with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began from (17.1% to 94.8%). |
| Project Objective # 3: Increase knowledge and adoption of key family practices for child health by child caregivers with support from community leaders and health providers | | | |
| Inputs | Activities | Outputs | Outcome |
| Trainers IEC materials including booklets and story boards for use in training CG volunteers Logistical support Supervision | MOH district staff participated in promoter training workshops for child survival project interventions CG volunteers trained in BCC messages every two weeks by CG Promoters Saturate communities in the project area with focused BCC messages, reaching every household every two weeks through CG volunteers. Religious leaders were mobilized to learn BCC messages and share these messages with their congregations and communities. | 23 promoters and 4 supervisors trained. 2853 volunteers (CSP July report) trained in BCC messages for diarrhea, malaria and nutrition as well as in referring pregnant women to HC for delivery. The benchmark for bi-weekly meetings has been met by 87.8% of the CG, More than 80% of households were visited on a bi-weekly basis. A total of 265 religious leaders (CSP July report) were organized into 24 Religious Care Groups and meet once a month with the health promoter. They have been taught the same BCC messages as the CG volunteers and have received the same booklets. | Increase in % of children aged 12-23 months who received measles vaccine according to the vaccination card by the time of the survey (from 55.1% to 82.3%). Increase in % of children aged 12-23 months who received DTP1 / PENTAVALENT1 according to the vaccination card by the time of the survey (from 62.5% to 86.5%). Increase in % of children aged 12-23 months who received DTP3 / PENTAVALENT 3 according to the vaccination card by the time of the survey (from 61.0% to 85.4%). (Increase from 73.5% to 94.8% when mother's recall is included.) Increase % of mothers of children age 0-23 months who know at least two signs for seeking immediate care when their child is sick from 62.2% to 96.9%. |

Project goal and objectives:

The project's goal was to achieve significant and sustained reductions in mortality and morbidity among children under five years' of age and women of reproductive age in Kibuye Health District, Gitega Province. These outcomes were to be achieved through a comprehensive Community Integrated Management of Childhood Illness (C-IMCI) strategy, building on WR's extensive experience using the Care Group Model as an effective community mobilization approach for the implementation of an integrated package of C-IMCI interventions (source: DIP, p. 43)

Project Location:

The program covers Kibuye Health District in the southern part of Gitega Province, which is located in the center of Burundi. Kibuye Health District has four communes: Makebuko, Itaba, Bukirasazi and Buraza. (Source: DIP, p. 29)

Estimated project area population:

The beneficiary population is based on the estimated number of children under age five years and women of reproductive age living in Kibuye Health District, using the total population as collected from the four commune administrative officers. At baseline, the beneficiary population was estimated to include approximately 24,376 children under-five years (0-59 months) of age (6,688 children between 0-11 months; 6,688 children between 12-23 months; 11,000 children between 24-59 months) and 38,176 women of reproductive age (WRA). In Burundi, WRA is defined as women between the ages of 15-45, not up to 49 as is normative elsewhere (DIP, p. 30). At end of project, for a total estimated population of 209,780, the number of beneficiaries had increased to 87,269: 37,551 children under-five years (0-59 months) of age (11,643 children between 0-11 months; 6,688 children between 12-23 months; 11,000 children between 24-59 months) and 49,718 women of reproductive age (WRA).

Technical and cross-cutting interventions

The Community Integrated Management of Childhood Illness is a cross-cutting intervention as it focuses BCC messages on key childhood illnesses which contribute to the main causes of morbidity and mortality: diarrhea, malnutrition and malaria. In addition, CG volunteers encourage mothers to take their children for immunizations, for pregnant women to obtain prenatal care, post-natal care, and to deliver their babies at the health centers.

PD/Hearth is also a cross-cutting intervention as it empowers mothers of malnourished children to implement nutritional changes using local resources. In addition, by teaching the women what other women in their community are doing well, the proposed changes are realistic and thus more readily implemented. Because the effectiveness of PD/Hearth has been duplicated in-country by other donors such as UNICEF, MOH has officially determined that this will become a national strategy to use in responding to moderate malnutrition.

Key to the success of both interventions is the on-going encouragement of behavior change through frequent home visits by Care Group volunteers as well as bi-monthly supervision of volunteers by health promoters. CSP staff was involved in community mobilization in collaboration with local leaders (*chefs de colline*) and COSAs in order to integrate BCC in community activities.

Project Design:

This project has implemented a Community Integrated Management of Childhood Illness (CIMCI) program, using the Care Group Model as an effective community mobilization approach. Care Groups (CG) are made up of 10 to 12 volunteer community health educators who meet every two weeks with project staff for training, supervision and data collection. Each volunteer is responsible for regularly visiting approximately 10 of her neighbors to share what she has learned during training and to encourage behavior change. Each Care Group as a whole is trained and

supervised by a paid WR health promoter, who is supervised by WR Supervisor. World Relief Promoters and Supervisors work closely with their MOH counterparts to improve access to and uptake of health services, analyze HIS data and coordinate outreach activities. WR CSP Program Manager and staff have trained and supervised both district supervisors and health promoters. WR Home Office provided technical oversight as well as financial management support.

Initially, all Care Group volunteers were trained to provide guidance to mothers using the PD/Hearth strategy. WR field staff found that this was ineffective and modified their approach by asking one volunteer woman per Care Group to be the point person or ‘mother of light’. This improved follow-up of children who had finished the 12 days’ of PD/Hearth, and resulted in children maintaining weight gains for at least 2 months.

Although family planning was not a planned intervention, the addition of a Flex Fund grant in 2012 made it possible for staff to train promoters and Care Group volunteers in FP using IEC materials from the MOH, thus ensuring that key messages were similar to what CHWs had been taught. Also, Care Groups became a distribution point for FP supplies, either through CHWs or specially-trained Care Group leaders (in groups without a CHW). **This increased FP use rates in the last year of the grant from 16% at baseline to 50% (42.7% using a modern method).** Please see the FP Flex Fund Program Statement in Annex 12.

Partnerships:

Partnerships were created on many levels. At the colline level, village elders have been involved in project activities such as the census, training sessions, community meetings and data collection. At the commune level, local authorities provided space for CG meetings and have spoken to husbands who were reluctant to have their wives attend CG meetings as volunteers. CHWs have partnered with CSP promoters in collecting data and have also attended CG training sessions.

Health center staff jointly discussed health data with CSP promoters. At the district level, MOH staff and CSP staff have jointly analyzed commune data. Local authorities as well as MOH administrative staff noted that project staff collaborated effectively with them in the implementation of project activities. For example, during focus groups with COSAs, they explained that they integrated project activities into their annual work plans (see Annex 15.)

Collaboration was also evident in that the CSP staff met regularly with MOH central staff, UNICEF and WHO to keep abreast of new strategies being discussed for community-based implementation. For example, the project director was invited to participate in the creation of technical tools and to be a trainer in launching CCM for malaria in other provinces where NGOs had the treatment kits. WR CSP staff also met with other NGOs such as Concern Worldwide, CRS, and Healthnet-TPO to share strategies and lessons learned in the implementation of activities. *Duturamane*, a local organization involved in creating income generation and credit associations, also partnered with CSP staff to implement credit associations for CG volunteers.

Mission collaboration

Burundi is classified as a USAID Limited Presence Country, with oversight from USAID/East Africa. WR maintained communication with personnel from both offices. During the life of the project, the CSP received 2 site visits from USAID/Burundi. The team met with Jim Anderson, USAID/Burundi Country Representative and Donatien Ntakarutimana, MD, Program Development Specialist, Health to discuss implementation of the final evaluation. Stanislas Ntahobani, MD, of HIV Prevention, represented USAID at the MOH final evaluation debriefing.

This project has strongly contributed to the Mission's overall health objectives (Burundi Global Health Initiative 2011-2015, September 2011): women, girls and a gender approach to reducing morbidity and mortality; improving USG health program impact through strategic coordination and integration; strengthen and leverage multilateral organizations, global health partnership and private sector engagement.

This CSP implemented an integrated approach in C-IMCI for malaria, diarrhea, hygiene (latrines and hand washing), and malnutrition. CG volunteers have mainly been women who received training in BCC messages and implemented PD/Hearth management of moderately malnourished children. Qualitative data indicated that the women are more involved in other community activities. For example, CG volunteers have been elected to be part of COSA.

The Mission is also seeking to expand the MCH programs which include care group activities, and the results from this CSP demonstrate the effectiveness of this approach. The CSP has contributed to improving USG health program impact through the coordination and integration of activities. For example, CG volunteers and CSP staff have been actively involved in bednet distribution, mass vaccination campaigns, data collection and data analysis in the District of Kibuye. This latter contribution was emphasized by local administrators, MOH provincial and district staff.

In addition, CG volunteers have been referring pregnant women to health centers for labor and delivery. CHWs have been included in all community-level CSP training and activities, thus strengthening the delivery of preventive services. PD-Hearth has been selected as the national strategy for responding to moderate malnutrition and thus contributes to the Mission's goal of strengthening global partnerships.

In reviewing the Burundi Global Health Initiative 2011-2015, it was noted that on-going CSP which are funded through USAID/Washington, D.C. and implemented by NGOs are not specifically included in the document.

C. Evaluation Assessment Methodology and Limitations

Quantitative and qualitative data were obtained to evaluate this project at midterm and at end of project. As the baseline KPC-2000 survey had been translated into Kirundi, the same questions were used both times. Lot Quality Assurance Sampling method was used to randomly determine 24 respondents per commune for each indicator, for a total sample size of 96 households district-wide (see KPC report in Annex 6).

Qualitative data was obtained thru individual interviews (24), focus groups (16 groups) and in-home interviews (12 homes). The same questions selected at MTE were used for the final evaluation. One additional question concerning scaling up the project was added to the interviews with MOH staff (Annex 13: Project Data Form). The team determined that the sample size at certain levels would be complete while at other levels would be random. Complete samples included all MOH district personnel, all TPS, WR/Burundi staff involved in project implementation, and all project supervisors and promoters. The focus groups were chosen randomly. The district ward or *arrondissement* of Itaba which had been selected for the midterm evaluation was excluded from the focus groups. Of the three remaining district wards, one was randomly selected. However, as it only had one health center, another ward was selected, and two of its health centers randomly selected. For each health center, the head nurse or assistant head nurse as well as the COSA were interviewed. A CG group and group of elected elders or *chefs de colline* were randomly selected for each health center. In-homes interviews of mothers of children under five were selected based on whether she was at home. All interviews were conducted in such a manner as to provide privacy as well as confidentiality. Comments made during focus group discussions were not attributed to any particular member (Please see Annex 10: List of persons contacted).

The Final Evaluation team was divided into 3 smaller teams so that a member of MOH district or provincial staff was in each one as well as a member of WR district and central staff. After completing each interview set or focus group, data was transcribed by the consultant. The teams then analyzed the KPC data to identify what contributed to the results. The qualitative data was analyzed for common themes. Based on these two analyses, the team proposed recommendations. The KPC results were translated into French prior to presenting them during debriefing sessions. Key results and recommendations were then shared with the Provincial Medical Director, key MOH staff in Burundi, USAID and other NGOs also involved in child survival projects.

D. Data Quality and Use

Random selection is foundational to avoiding bias in collecting quantitative data. The quality of the KPC data at baseline and final assessment was assured by first translating the questions into Kirundi, and, using the same ones at midterm and final evaluation. Questions were field-tested both times. Personnel involved in collecting the data received appropriate training. Data was entered using double data entry that allows the EPI INFO program to check for errors and to ensure quality control. The data were analyzed in EPI INFO program version 3.2.2; Excel.4 and Excel.5. Basic statistical analysis, primarily frequencies and ranges, were conducted to identify any inconsistencies, so that the data could be cleaned accordingly. An appropriate table was designed for each indicator. (Please see the full KPC report in Annex 6.)

For qualitative data, the strategy used to avoid bias is to ensure that representatives of all stakeholders are included in the sample. The stakeholders for CSP were the provincial medical officer, MOH district staff, the medical director of the district hospital, health center personnel (head nurse and TPS), COSA, *chefs de colline* and CG volunteers. Qualitative data was collected at baseline (for DIP preparation) and at the mid-term evaluation. The interview and focus group questions used at the final assessment were the same ones as used during mid-term. Before data collection was begun, the questions were reviewed with all team members and potential

differences in translation from French into Kirundi discussed. One team member transcribed the responses while the others led the discussions.

During the last two years of the project, significant attention was given to obtaining reliable data, and to discussing results with MOH district staff. For example, CSP data indicated that vaccination coverage was higher than district data. Project staff initiated the follow-up of lost cases. It was discovered that these children had been vaccinated, but, the data had not been registered at the health centers. Part of the issue was that during mass vaccination campaigns, not all children were noted in registries. The data collected by CG was thus accurate. To date, however, there is no formal system for integrating C-HIS into MOH HIS.

One of the indicators used in the KPC survey is Vitamin A coverage. The current health card has a section for noting this information. However, Vitamin A is distributed twice a year during mass vaccination campaigns, and mothers receive a small card stating their child has received Vitamin A. During the last campaign, staff had insufficient cards to distribute. Therefore, coverage cannot be determined through the health card alone, and is based solely on recall.

Another area of difference between MOH-HIS and CSP-HIS is how quality is measured. For example, the MOH only counts the number of new latrines for reporting purposes, while the project also looks at the quality of the latrine (depth and maintenance). Another example is postnatal care of the newborn. The level of coverage is linked to the newborn care being given while the mother is still in the health center. DHS data for 2010 made the distinction between postpartum and postnatal care. For the East Central Region, postpartum care was 28.9% while postnatal care at 2 days was 6.8 %. It was observed during the health center visits that personnel make no distinction between postpartum and postnatal care at 15 days and 45 days after birth. Health Center personnel have requested that postnatal care be the focus of future activities.

E. Presentation of Progress in Achieving Project Results

| <i>Table 3: M&E Matrix—Final Evaluation</i> | | | | | | | Explanation of progress |
|--|--|---|----------------|-----------|----------|--------------|--|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | |
| CONTROL OF DIARRHEAL DISEASES/WATER & SANITATION | | | | | | | |
| Increase % children with diarrhea who receive ORS or recommended home fluids | % children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids | KPC | 43.7% | 78.1% | 89.6% | 70.0% | CSP has effectively taught mothers the appropriate care and exceeded the final target. ORS is available only at the health center level. |
| | <u>Community ORS Distribution</u> : Number of ORS packets distributed by volunteers | Care Group Registries & Monthly Project Reports | N/A | 10,916 | N/A | N/A | ORS community distribution by volunteers or CHW is not currently approved by MOH. |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|--|---|--|-----------------------|------------------|-----------------|---------------------|---|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| | <u>Health Center ORS Stock:</u> % Health Centers without ORS stock-outs each month | Health Center Registries & Monthly Project Reports | N/A | 86.0% | 70.5% | N/A | Only 1 HC reported a temporary stock-out for 2 weeks only. The % is lower in part because there were only 10 functioning HC at FE, compared with 11 at MTE (so the denominator changed). This HC was based in Kibuye hospital—there was no negative impact on the community. Since the FE, 2 more HC have opened in the same commune. |
| Increase % children with diarrhea who are offered increased fluids during illness | % children 0-23 months with diarrhea in the last two weeks who were offered more fluids during the illness | KPC | 32.4% | 67.7% | 99.0% | 70.0% | Volunteers trained mothers to prepare and give additional fluids during home visits and PD-H. Analysis of data and follow-up with CG members when indicators drop; planning meetings with elected leaders to determine health priorities. Frequent supervision of CG by promoters as well as TPS during home visits has reinforced behavior change. |
| Increase % children with diarrhea who are offered continued feeding during illness | % children 0-23 months with diarrhea in the last 2 weeks who were offered the same amount or more food during illness | KPC | 63.4% | 42.7% | 99.0% | 70.0% | See above. |
| | <u>Zinc:</u> % children age 0-23 months with diarrhea in last two weeks who were treated with zinc supplements | KPC | N/A | N/A | N/A | | MOH has instituted a treatment policy which includes ORS and zinc to treat diarrhea. Data is not collected by health centers. To establish a base-line, OR is needed. |
| | <u>Community Zinc Distribution:</u> Number of zinc treatment courses distributed by volunteers. | Care Group Registries & Monthly Project Reports | N/A | N/A | N/A | | MOH has not begun community-based zinc distribution. |
| | <u>Health Center Zinc Stock:</u> % Health Centers without zinc stock-outs every month | Health Center Registries & Monthly | N/A | N/A | N/A | | MOH has begun distribution of zinc to Health Centers. From August 2011 to September 2012, one HC experienced a stock-out for 3 |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|--|--|--|----------------|-----------|----------|--------------|---|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| | | Project Reports | | | | | months. |
| Increase % mothers of children 0-23 months who wash their hands with soap at appropriate times | % mothers of children 0-23 months who live in a household with soap or a locally appropriate cleanser at the place for hand washing and who washed their hands with the cleanser after defecation and at one other appropriate time. | KPC | 18.0% | 38.5% | 89.6% | 70.0% | Mothers were taught how to make and use tippy taps. |
| | <u>Soap at the place for hand-washing:</u> % mothers of children ages 0-23 months who live in a household with soap at the place for hand washing | KPC | 53.7% | 46.9% | 90.6% | N/A | By mid-term, the project had stopped distribution of soap. |
| | <u>Safe feces disposal:</u> % mothers of children 0-23 months who disposed of the youngest child's feces safely the last time s/he passed a stool. | KPC | 58.2% | 79.2% | 86.5% | N/A | Frequent BCC messages about fecal danger were given during Home Visits by volunteers, during community meetings led by village elders. Follow-up visits by village elders, COSA and volunteers to homes where cases of diarrhea were noted. |
| | <u>Latrines:</u> % mothers of children 0-23 months who have a covered latrine or toilet connected to a drainage system. | KPC | 9.0 | 14.6% | 69.8% | N/A | Action plans determined by COSA have included latrines as a priority. TPS are responsible for evaluating quality and usage. Some COSA have decided to fine families who do not have a functional latrine. |
| | <u>Point of Use:</u> % households of children age 0-23 months that treat water effectively (includes boiling, chlorination, solar disinfection, and filtration). | KPC | 1.7% | 4.2% | 32.3% | N/A | MOH has re-started Sur'Eau distribution. UNICEF distributed Aquatabs for a few months. 29% of families surveyed boil their drinking water (which was the project message). |
| | <u>Community Sur'eau Distribution:</u> Number of Sur'eau units distributed by volunteers | Care Group Registries & Promoter Reports | N/A | N/A | N/A | N/A | CG and CHW were trained on how to distribute Sur'Eau and Aquatabs, and, on the key behaviors to target for C-CMI. However, Sur'eau was not included in the UNICEF CBD grant. |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|---|---|--|-----------------------|------------------|--------------------|---------------------|--|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| | <u>Two-week period prevalence of diarrhea</u> : % children age 0-23 months who had diarrhea at any time in prior 2 weeks. | KPC | 23.7% | 46.9% | 20.8% | N/A | By mid-term, the project was no longer distributing soap; and most homes visited did not have a hand-washing site. Project staff introduced the tippy-tap. Elected officials and project staff discussed the need to decrease dependency on outside resources during community meetings. |
| NUTRITION | | | | | | | |
| Increase % newborns who were put to the breast within one hour of delivery and did not receive prelacteal foods | % newborns who were put to the breast within one hour of delivery and did not receive prelacteal foods | KPC | 62.0% | 79.2% | 85.4% | 75.0% | HC staff were trained to encourage mothers to begin nursing newborns within one hour of birth. Elected officials and CSP staff encouraged HC deliveries; HC statistics show an increase in assisted births. Focus group data affirm that very few women deliver at home now. |
| | <u>Exclusive breastfeeding</u> : % children 0-5 months who were exclusively breastfed during the last 24 hours | KPC | 86.4% | 86.5% | 95.8% | N/A | EBF messages were shared by project staff and volunteers on home visits, health center personnel and during PD-Hearth sessions. |
| Increase % infants and young children age 6-23 months fed according to minimum appropriate feeding practices | <u>Infant and young child feeding</u> : % infants and young children age 6-23 months fed according to minimum appropriate feeding practices. | KPC | 25.6% | -- | 92.7% | 50% | Frequency of feeding (part of the minimum appropriate feeding practices calculation) was not measured at the midterm. There is a tradition in Burundi to prolong breastfeeding until 2 years of age, which contributed to this indicator being met. |
| Achieve sustained adequate or catch-up growth in children who complete the Hearth program. | % children who completed the Hearth program achieve sustained adequate (400+ grams) or catch-up (over 700 grams) growth for at least 2 months after Hearth. | Registers maintained by promoters and specially trained volunteers for each cycle of Hearth. | N/A | 57.1% | 92.3% (862/934) | 60.0% | One CG volunteer per group was given extra training in PD/Hearth, and responsible to follow-up children after the PD/H session, to encourage mothers in their new changed behaviors, and the results shared during PD/H meetings also motivated them. In Burundi, it is a shameful thing to have a malnourished child. |
| | <u>Dietary diversity of foods consumed by young children</u> : Mean number of food groups eaten in the last 24 hours by children | KPC | 3.2 | 4.6 | 4.7 | N/A | There was an improvement as children are now receiving on average more than 4 groups of foods (close to 5). The BCC message to have at least 3 |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|---|---|-------------------------------|-----------------------|------------------|-----------------|---------------------|--|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| | age 6-23 months. | | | | | | groups of foods was mentioned during focus groups and individual interviews. |
| | <u>Vitamin A supplementation in the last 6 months</u> : % children aged 6-23 months who received a dose of Vitamin A in the last 6 months (card verified or mother's recall). | KPC | 81.7% | 80.2 | 90.6% | N/A | These results are based on maternal recall. Vitamin A distributed during mass vaccination campaigns are not recorded in the health card. |
| | <u>Underweight</u> : % children 0-23 months who are underweight (-2 SD for the median weight for age, according to WHO/HCHS reference population). | Anthropometry during KPC | 16.4% | 36.5% | 4.2% | N/A | Well-attended nutrition screenings (80% of expected children), allowed staff to quickly identify and refer children. District data confirmed the lower levels of malnutrition. This improvement was also mentioned during focus group discussions and individual interviews. The variation in data collection is a factor.: the baseline was done in April (wet season), the midterm in September (just after dry season, thus the hungry season), and the final evaluation in July (the middle of dry season). This makes the results particularly significant. Children -2SD were enrolled in PD/H. Children -3SD from the mean were referred to HC for treatment with Plumpnut. |
| MALARIA | | | | | | | |
| Increase % households with a child 0-23 months with an LLIN | % of households with a child 0-23 months who own an LLIN | KPC | 3.0% | 75% | 72.9% | 50.0% | MOH distributes LLIN to pregnant women at ANC, and when children are vaccinated against measles. |
| | Number of LLINs distributed by volunteers | Promoter distribution records | N/A | N/A | N/A | N/A | Promoters and CG volunteers have participated in distribution activities organized by community leaders in 2008. |
| Increase % children 0-23 months who slept under an | % children age 0-23 months who slept under an insecticide-treated bed net the previous night (LLIN | KPC | 8.0% | 64.6% | 69.8% | 50.0% | LLINs were distributed in 2008 after the CSP baseline, and CG volunteers showed mothers how to correctly hang |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|--|--|---|-----------------------|------------------|-----------------|---------------------|---|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| LLIN or ITN the previous night | or ITN treated within the past six months). | | | | | | the nets. |
| Increase % children 0-23 months with fever who receive appropriate antimalarial treatment within 24hours | % children 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began. | KPC | 17.1% | 49.0% | 94.8% | 60.0% | CG volunteers appear to be making more referrals. Preventive care is now free for pregnant women and children under 2 years of age. BCC messages were included in community meetings. |
| | Number of antimalarial treatment courses distributed by volunteers | Volunteer distributor registries and promoter reports | NA | NA | NA | NA | MOH will be rolling-out CCM for malaria in areas where NGOs provide medication. The CSP project director has been involved with national-level creation of tools and training of personnel. WR has just signed a contract with UNICEF to provide CCM in Kibuye, effective October 2012. CBD is expected to begin in April 2013. |
| Increase % women who slept under an ITN during last pregnancy | % mothers of children 0-23 months who slept under an ITN during their pregnancy with the youngest child. | KPC | 32.7% | 66.7% | 80.2% | 50.0% | There has been an increase in pregnant women receiving prenatal care and thus receiving a LLIN. |
| | % mothers of children 0-23 months who took effective anti-malarials during the pregnancy with the youngest child | KPC | N/A | N/A | N/A | N/A | IPT for pregnant women is not a current policy in Burundi. |
| | <u>Two-week period prevalence of fever:</u> Proportion of children age 0-23 months with a report of fever in the last 2 weeks | KPC | 37.0% | 53.13 % | 40.6% | N/A | Results are not significantly different from the baseline. |
| IMMUNIZATION | | | | | | | |
| Increase coverage of DPT1 among children 12-23 months | % children 12-23 months who received DPT1 according to the vaccination card by the time of the survey | KPC | 62.5% | 63.5% | 86.5% | 80.0% | CG volunteers and health promoters have been actively involved in MOH immunization activities. This high level of vaccination coverage is also reported by district health personnel. At the provincial level, Kibuye District is used as a model. |
| | <u>Access to Immunization Services:</u> % children 12-23 months who received | KPC | 94.9% | 95.8% | 96.9% | N/A | |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|--|--|--------------------|-----------------------|------------------|-----------------|---------------------|---|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| | DPT1 according to the vaccination card or mother's recall. | | | | | | |
| Increase coverage of DPT3 among children 12-23 months | % children 12-23 months who received DPT3 according to the vaccination card or health booklet | KPC | 61.0% | 62.5% | 85.4% | 80.0% | Project staff initiated the follow-up of lost cases as project data was different from MOH data. It was discovered that these children had been vaccinated, but the data had not been registered at the health centers. Note discrepancies between indicators based on recall vs. card. |
| | <u>Health System Performance regarding Immunization Services</u> : % children 12-23 months who received DPT3 according to the vaccination card or mother's recall by the time of the survey. | KPC | 73.5% | 90.6% | 95.8% | N/A | |
| Increase coverage of measles among children 12-23 months | % children age 12-23 months who received a measles vaccination according to the vaccination card or health booklet | KPC | 55.1% | 57.3% | 82.3% | 80.0% | Note discrepancies between indicators based on recall vs. card. |
| | Measles vaccination: % children age 12-23 months who received a measles vaccination according to the vaccination card or mother's recall | KPC | 89% | 90.6% | 96.9% | N/A | |
| | Vaccination card or health booklet –Ever had: % mothers of children 12-23 months who were ever given a vaccination card or health book for their youngest child 0-23 months | KPC | 94% | 97.9% | 100% | N/A | |
| | Vaccination card or health booklet/ Currently have: % mothers of children 0-23 months who currently possess a vaccination card /health book for their youngest child 12-23 | KPC | 73.3% | 66.7% | 86.5% | N/A | Of the 12 households visited during the FE, 11 (91.7%) had vaccination cards or a written record. Health centers received a new shipment of health cards and could re-issue cards that had been lost. |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|--|---|----------------------|-----------------------|------------------|-------------------|---------------------|--|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| | months. | | | | | | |
| | Antigen and dose specific coverage: % children 12-23 months who received each antigen and dose that is part of the national immunization schedule by the time of the survey as verified by vaccination card or health booklet | KPC | | | | | MOH personnel indicated that the pneumococcal vaccine (PCV78) has recently been added to the list of recommended vaccines (since fall 2011). None of the cards examined during the home visits included this vaccine. |
| | BCG | | 72.0% | 64.6% | 86.5% | N/A | |
| | Polio 0 | | 69.7% | 61.5% | 86.5% | N/A | |
| | Polio 1 | | 65.3% | 63.5% | 86.5% | N/A | |
| | Polio 2 | | 61.7% | 62.5% | 86.5% | N/A | |
| | Polio 3 | | 56.0% | 63.5% | 85.4% | N/A | |
| | Measles | | 55.1% | 57.3% | 82.3% | 80.0% | |
| | Pentavalent 1(DPT1, Hib, and HepB) | | 62.5% | 63.5% | 86.5% | 80.0% | |
| | Pentavalent 2 (DPT2, Hib, and HepB) | | 63.0% | 63.5% | 86.5% | N/A | |
| | Pentavalent 3 (DPT3, Hib, and HepB) | | 61.0% | 62.5% | 85.4% | 80.0% | |
| | Drop-Out Rate: (DPT1-DPT3) / DPT1:(% children age 12-23 months who received DPT1 by 12 months according to vaccination card or health booklet % children age 12-23 months who received DPT3 by 12 months according to vaccination card or health booklet) / % children age 12-23 months who received DPT1 by time of survey according to their vaccination card or health booklet. | KPC | 2.5% | 1.6% | 1.1% | N/A | Project staff initiated the follow-up of lost cases as project data was different from MOH data. It was discovered that these children had been vaccinated, but, the data had not been registered at the health centers. |
| C-IMCI | | | | | | | |
| Increase % mothers who recognize two or more danger signs of childhood illness | % mothers of children age 0-23 months who know at least two signs for seeking immediate care when their child is sick | KPC | 62.2% | 86.5% | 96.9% | 80.0%. | BCC messages included during Home Visits and community meetings focused on the recognition of danger signs. |
| CAPACITY BUILDING& SUSTAINABILITY | | | | | | | |
| Mobilization of Community Volunteers | Care Group Meetings: Number and percent of Care Groups with at least | Promoter & Superviso | N/A | | 87.8% (183.6/209) | | |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|---|--|----------------------------------|-----------------------|---------------------------------|----------------------------------|---------------------|---|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| through the Care Group Structure. | two meetings per month | r Reports | | | | | |
| | <u>Care Group Attendance:</u> Number and percent of Care Groups with at least 70% volunteer attendance per month | Promoter & Supervisor Reports | N/A | 59.9% (124.6/4/208) | 84.1% (175.9/209) | 70% | Data for years 4 and 5. Numerator: average number of care groups with at least 70% attendance per month; Denominator: total number of care groups. |
| | <u>Volunteer Attrition:</u> Percent of volunteers who drop out for reasons other than death or movement out of the area per year (beginning year 2). | Promoter & Supervisor Reports | N/A | Year 2: 0.29% Year 3: 1.46% | Year 4: 0.1% Year 5: 0.001% | <10% | Note: For Year 5, volunteers were lost only due to death. |
| | <u>Care Group Performance:</u> Percent of Care Groups averaging 70% or above on verbal tests of intervention knowledge | Promoter & Supervisor Checklists | N/A | 93.5% | 93.6% | 70% | Sample of 47 care groups verbally tested in year 5 showed that 93.6% (44 out of 47) of Care groups averaged 70% or above in verbal tests of knowledge.) |
| | <u>Pastoral Groups:</u> Number and percent of pastoral groups that meet per month. | Supervisor Monthly Reports | N/A | 2% 18.68/ 24.5 =76 | 94.8% 22.8/ 24 | 70% | Numerator: average number of pastoral care groups that met, per month; Denominator: average total number of pastoral care groups |
| Integration of Care Group Model with Existing Ministry of Health C-IMCI Structure | <u>CHW Integration:</u> Average number and % Care Groups with a CHW in attendance in at least one meeting per month | Promoter & Supervisor Reports | N/A | 20.8% 43.3/ 208= 20.8% | 50.3% 105.1/ 209=5 0.3% | 70% | Numerator: average number of care groups per month with at least 1 CHW in attendance in at least 1 meeting; Denominator: total number of care groups |
| | <u>TPS Integration:</u> Average number of Care Group supervision visits made per TPS per month | Promoter & Supervisor Reports | N/A | 2.1 | 4.6 (23.1/5) | 4 | Increase in supervision visits as TPS are able go on joint visits with promoters using project motorcycles. |
| Institutionalization of Project Health Information System with District Health Information System | <u>Institutionalization of C-HIS:</u> Number and % health facilities involved in management of C-HIS per month | Supervisor Monthly Reports | N/A | 100% (11/11) | 100% (10/10) | 80% | All 3 health centers visited during the FE indicated that their staff was involved in data analysis with CSP promoters, and the joint decisions about priorities based on the analysis. |
| | <u>Institutionalization of Community-IMCI Number:</u> % COSAs involved in management of C-HIS per month | Supervisor Monthly Reports | N/A | N/A | 96.1% (9.6/ 10) | 80% | Health center personnel, TPS, COSA and CSP staff (promoters) were involved in the preparation and implementation of community health plans. |

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| Table 3: M&E Matrix—Final Evaluation | | | | | | | |
|---|--|-----------------------------|-----------------------|------------------|-----------------|---------------------|---|
| Objectives | Indicators | Data Source | Baseline Value | MTE Value | FE Value | Final Target | Explanation of progress |
| | Institutionalization of Community-IMCI: Number and % COSAs with current action plans for community health | Supervisor Monthly Reports/ | N/A | 90.9% (10/11) | 92.1% (9.2/10) | 80% | Focus group data indicated that the 3 COSAs interviewed did have community health action plans. |
| ADDITIONAL RAPID CATCH 2007 INDICATORS | | | | | | | |
| | Pneumonia: % children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider. | KPC | 52.9% | 82.3% | 97.9% | N/A | Access to health care increased as children < 5 and pregnant women now have free health services. BCC during Home Visits and during community meetings encouraged mothers to take their children for care if one of the danger signs was present. |
| | TT Injections: % mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child | KPC | 52.3% | 86.5% | 96.9% | N/A | District HIS indicated that there is adequate coverage for the first 2 doses of TT; however coverage drops for 5 doses. |
| | Skill Birth Attendance: % children age 0-23 months whose births were attended by skilled personnel. | KPC | 60.3% | 81.3% | 94.8% | N/A | Health center personnel, COSA members and village leaders all indicated that there are fewer women delivering at home. For example, in one commune the rate is currently 2 to 3 women of the 40 who were in labor. |
| | Post-natal Visit: % children age 0-23 months who received a postnatal visit from an appropriate trained health worker within three days after birth (newborn care). | KPC | 32.7% | 66.7% | 89.6% | N/A | |

Qualitative data obtained during interviews and focus groups were analyzed and common themes incorporated into the M & E matrix where appropriate. The following themes emerged during data analysis obtained from community members:

- Families are healthier (there is less diarrhea, better nutrition of children, a decrease in under-nourished children and more immunizations).

- Families know when to obtain care as quickly as possible: fever, diarrhea (dehydration), when going into labor, and the need to begin prenatal care early in pregnancy.
- There have been changes in health promotion behaviors: use of tippy-taps, use of LLIN, use of dish storage (tables to keep them off the ground and clean), families go to traditional healers less often; use three food groups for meals (mothers are adding vegetables and oil; use some of their eggs instead of selling all of them); maintenance of latrines, and more women deliver their babies at Health Centers.
- Of the 12 families visited for qualitative data collection during the Final Evaluation, seven had functional had washing sites.
- Community mobilization which is clearly observed during PD-Hearth activities.
- Using volunteers has allowed health messages to reach isolated rural families. These volunteers were also the mouth piece for Ward Administrators and Health Centers; they reinforced CHW and other community liaison efforts.
- The benefits of CG approach are evident in how women now help each other. There is an increase in knowledge among beneficiaries – they understand why they need to change certain behaviors. There is a decrease in an attitude of dependency (through the credit associations and PD-Hearth activities), and, social cohesion among different ethnic groups has occurred.
- Close collaboration between project staff, local administration and MOH; evidence of this in that Care Group volunteers activities are included in COSA quarterly action plans, and joint analysis of collected data permits timely interventions.
- Recruiting promoters has been an important way to provide employment in this rural area. However, only women were hired which raises a safety concern when needing to implement activities in remote areas.

The following themes emerged when interviewing CSP staff:

- Consistent and regular supervision has improved timely decision-making.
- In-service training has occurred quarterly for field staff. At the administrative level (supervision, accounting), training has been on the job and ad hoc rather than systematically planned and implemented.
- Purchasing power for staff has diminished over the life of the project due to the decrease in value of the Burundi franc.
- Increased maintenance costs for motorcycles have occurred during the last two years of the project as equipment has aged.
- Use of cell phones has facilitated communication between team members.
- Sharing of motorcycles between promoters has hindered and slowed supervision activities.
- Staff turn-over partly due to lower salaries than what is offered by other NGOs.
- Limited opportunities for field staff to visit other projects and share insights.

F. Discussion of the Progress Toward Achievement of Results

Contribution Toward Project Objectives

Before the inauguration of this five year USAID funded project, data gathered from reliable sources in Burundi showed that Burundi's estimated infant mortality rate was 156 per 1,000 live births, with an under-five mortality rate of 231 per 1,000 live births. Malaria accounted for

almost half of child deaths in health facilities nationwide, and malnutrition was the second leading cause of death with forty-one percent of rural children under five years of age underweight. Data from the UNICEF 2008 report show a decrease of infant and under-five mortality rate. Burundi's estimated infant mortality rate is 102 per 1,000 live births, with an under-five mortality rate of 168 per 1,000 live births¹.

The CSP success is part of a national trend. In May of 2012, DHS published results of the most recent DHS (2010). There have been significant improvements in infant and child mortality rates: "Between 1996- 2001 (10-14 years before the survey) infant mortality was 115 per 1000 live births and over the period 2006-2011, it was 59 per 1000 live births. In addition, child mortality has dropped from 204 to 96 per thousand live births over the same period. Rates of child mortality over the ten years varied according to place of residence (79 in urban areas against 131 in rural areas) and the level of education of the mother (141 when the mother has no education against 47 when the mother has reached a level of education secondary or higher)" (Enquête Démographique et de Santé Burundi 2010, 2012).

The strategy of using Care Groups has been implemented in the whole district, and effectively sensitized the population to BCC messages. The PD/Hearth strategy has also been successfully implemented as malnourished children have regained lost weight and maintained the weight gain for more than 2 months (The Final KPC shows a significant reduction in the % of children under 2 years of age who are malnourished). All key activities were on target except for those which depended on the MOH decision to implement community based management (CBM) of diarrhea and malaria as well as the distribution of zinc. As of the Final Evaluation in July, CBM had not been implemented. However, WR Burundi has just signed a contract (backdated to October 2012) with UNICEF to implement CCM for malaria and diarrhea in Kibuye district. (WR is cost-sharing 50% and UNICEF is providing medicines for CCM and 50% cost-share.)

A formal sustainability design methodology was not included in the DIP. That said, the strategy of focusing on key health behaviors with frequent encouragement to make changes from Care Group volunteers and CSP promoters, and the use of local food available in homes has fostered long-term behavior change. The integration of CHWs, TPS and COSA in all project activities has contributed to sustainability. COSAs have incorporated project BCC messages into their action plans, and also explained how CSP promoters and CG volunteers were responsible for carrying out activities (Annex 15 for an translated COSA action plans.)

The *Ramba Kibondo* CSP met or surpassed the following End-of-Project objectives:

- **ORS for children with diarrhea** increased from 43% to 89%, and **giving increased fluids for children with diarrhea** from 32% to 99%. Every two weeks, CSP promoters taught volunteers in Care Groups through stories, songs and role plays using IEC materials (booklets and flash cards). Messages were also shared in community mobilization meetings organized by CSP promoters and COSAs and by religious leaders

¹ UNICEF/Institut de Statistiques et d'Etudes Economiques du Burundi (ISTEEBU). *Enquête Nationale d'Evaluation des Conditions de vie de l'Enfant et de la Femme au Burundi (ENECEP-BURUNDI 2000)/Multi-Indicator Cluster Survey, Rapport Final*. Burundi 2000. [hereafter: **MICS 2000**]

during their activities. Care Group volunteers also demonstrated how to check for signs of dehydration, when to take a child to the nearest Health Center and to use home-available fluids when ORS packets are not available due to stockouts. Volunteers were also taught to make a mixed porridge (sorghum, soya and maize) and to add crushed bananas, fruit or orange juice into it. It is also most important to be patient. ORS packets are free at Health Centers, as the MOH has not yet decided to implement community-based distribution. However, WR has recently obtained a UNICEF grant for CCM which may include ORS packet distribution in communities to trained volunteers.

- **Children 0-23 months of age fed according to minimum appropriate feeding practices** increased from 26% to 92%. This strong improvement is the result of teaching mothers how to use locally-available foods (PD/Hearth principles). It is also a result of prolonged breastfeeding which is common in Burundi. However, non-breastfed children did not meet this indicator, as milk is not part of childhood feeding practices and the majority of families do not raise cows.
- **Immediate breastfeeding after delivery** increased from 62% to 85%: CG volunteers and *nyambakumbi* (village leaders) encouraged women to deliver at the nearest health center. Some leaders decided to levy a fine on families where women who delivered at home. By the end of project, the main reasons women delivered at home were because they waited too long to leave for the Health Center, and if the distance to the Health Center was too great. Health Center staff encourage immediate postpartum breastfeeding.
- **Household ownership of Long-lasting Insecticide-treated bednets (LLINs)** increased from 3% to 73%. In 2008, LLINs were distributed to families in Kibuye. The MOH has continued to distribute nets to pregnant women (as an incentive to come for prenatal care early) and when a child received their measles vaccination. This resulted in **use of LLINs by children 0-23 months to increase from 8% to 70%. Also, use of LLINs by pregnant women** increased from 33% to 80%. At the midterm, it was noted that some families who had bednets were not using them. Care Group volunteers were taught how to hang the nets correctly, and they taught their neighbors how to do so.
- **Measles vaccine coverage increased from 55% to 82% and DPT 3 coverage increased from 61% to 85%.** CSP staff and Care Group volunteers were involved in mass vaccination campaigns. Volunteers mobilized communities to participate, and the CSP provided logistical support in gasoline and vehicles for MOH district staff. Immunization messages were also given by village leaders during community mobilization meetings and by religious leaders during their daily activities. Vaccines are free of charge. Care Group volunteers were deliberate in following-up with children who needed vaccinations.
- **Rapid treatment of suspected pneumonia cases** increased from 53% to 98%. **Knowledge of at least two danger signs for seeking immediate care** increased from 62% to 97%. BCC messages taught to Care Group volunteers included danger signs that indicated that mothers needed to take their child to the nearest Health Center. These messages were also given during community mobilization meetings by CSP promoters, MOH district staff and by religious leaders during their activities.
- **Children given anti-malarial medicine for fever within 24 hours** increased from 17% to 95%. This strong result is because mothers now realize the signs of severe illness, and Health Centers reported no stock-out of treatment kits. Free medical treatment for children under 5 years has also made this objective attainable.

- **Skilled attendants at birth** increased from 52% to 95%. Care Group volunteers shared this message, and village leaders also promoted health center deliveries. Health Center nurses are generalists and are trained to assist with normal deliveries. MOH has implemented free care for pregnant women as an inducement to deliver at Health Centers.
- **Post-natal visit from an appropriate trained health worker** within three days after birth increased from 33% to 89%: The level of coverage is linked to newborn care being given while the mother is still in the health center. DHS data for 2010 made the distinction between postpartum and postnatal care. For the East Central Region of Burundi, which includes Kibuye district, postpartum care was 28.9% while postnatal at 2 days was 6.8 %. The Final Evaluation team noted that health center personnel made no distinction between postpartum and postnatal care at 15 days and 45 days after birth. Health Center personnel requested that postnatal care be the focus of future activities.
- **Maternal hand-washing at appropriate times** increased from 18% to 89% and the **presence of soap at hand-washing stations** increased from 53% to 90%. At midterm, it was noted that many homes did not have hand-washing stations, and it was recommended that families be taught how to make and use tippy-taps. This recommendation was implemented with good results.
- **Continued feeding during a diarrhea episode** increased from 63% to 99%: This was one of the key BCC messages that CG volunteers taught their neighbors, and it was also included in community meetings and during religious activities.
- **Percent of children 0-23 months old who were underweight** decreased from 16% to 4.2%. This dramatic decrease in underweight children is a result of the effectiveness of PD-Hearth. Key to this strategy is the mobilization of the community, the use of local foods and the frequent follow-up of malnourished children by CG volunteers.
- **Effectively treating water in households at point of use** increased from 1% to 32%. Most households indicated that they were boiling their water. This had been the main message during home visits and community-wide meetings.
- **Households with latrines increased from 9% to 79%** As number of latrines is now a PBF indicator for MOH staff, TPS are very intentional in encouraging families to have a latrine. CSP promoters and Care Group volunteers have therefore focused on proper use and maintenance of latrines, which is not supported by MOH PBF, but is important.

The CSP Phase-out Plan

The project developed a phase-out plan in the last year of the project. Care Group presidents were trained to lead volunteer meetings, and did so under the supervision of the CSP promoters. Care Group volunteers will start meeting monthly (instead of biweekly) so they can be supervised by TPS. CHWs and TPS have been involved in project activities, so HIS data collection and analysis will continue. The Government of Burundi National Health Development Plan (NHDP 2011-2015) is responding to this challenge to achieving health objective: *“there are no clear strategies for distribution, coverage, and retention of staff in rural areas. Less than 50 percent of health facilities meet the minimum staffing requirements. No human resource (HR) management tools exist, and there are specific HR shortages in medical specialists, pharmacists, and anesthetists. Public sector salaries remain low (and their real value has significantly declined in recent years) and are substantially lower than those in neighboring countries.”*

A successful phase-out will depend partly on sufficient MOH personnel and increased logistical support for the TPS. Currently, only 5 of the 11 health centers in Kibuye have a TPS as part of the staff. World Relief Burundi has indicated that they are committed to continuing to work in the Kibuye district and have obtained additional funding to broaden child survival activities to include FP (USAID Flex Fund) and CCM of malaria and diarrhea (see Annex 12, Special Reports, for the two Program Statements.)

It is commendable that this project was funded for 5 years. However, as its implementation occurred during a post-conflict recovery period, it would have been preferable to fund it for 7 to 8 years. There was a great deal of infrastructure-strengthening and capacity-building of personnel that had to be done before activities could be implemented. Given these challenges, it is very exciting that the project results were positive.

Key project elements and activities that affected results:

1. Effective volunteer recruitment: The Care Group model is a decentralized structure which magnifies CHW impact. One woman is elected from groupings of 10 – 12 households to serve as volunteers. The volunteers are trained every two weeks and return to teach BCC to their neighbors, and, to encourage them to implement change. The CG volunteers have increased opportunities for outreach activities for which CHWs are responsible.

2. Linking with MOH structures for sustainability: An important project goal was to sustainably integrate the Care Group volunteer structure into the MOH system. CHWs for each health center were integrated into Care Groups (see photo on cover), to coordinate activities and key messages. This further decentralizes BCC messages and data collection. A significant challenge to this was that per cultural norms, volunteers expect to gain something from their activities. It is not clear whether the MOH will be able to remunerate volunteers as it does for CHWs and *Nyumbakumis* (village leaders) who receive a small remuneration for referring pregnant women to deliver at Health Centers. In response to this, over the past two years the CSP has collaborated with a local NGO, *Dukuramane*, to create credit associations for CG volunteers to access income generating activities. CG volunteers are now sufficiently motivated and the only reason for loss of volunteers has been death. The credit association meetings were held on the same day as the health education meetings.

3. Post-conflict development context: although development is underway, residual impact of the conflict remains, especially in the belief that outside agencies should be providing goods to local families. For example, in the PD/Hearth program, families repeatedly asked when they were going to receive the food supplements that other projects were handing out in their nutrition programs. At first, women were reluctant to bring their own foods from home to the PD/Hearth meetings. However, they understood that if they could use what was available in their own home, then they could make a difference in their children's health. This dependency mentality was noticeable during the midterm evaluation in remarks made during all focus group sessions, as well as at all levels of interviews, whether CG volunteers, community members or MOH staff. Individuals indicated that they should benefit monetarily. The culturally respectful way used to raise this issue was to ask for "soap." By end of project, due to the creation of

income generating activities, individuals had shifted their focus away from ‘soap’ to requesting capacity building activities.

4. Increased use of key MOH services

District-level MOH also perceive that their workload has increased. The current MOH performance-based salary structure has only one performance criterion for community health: latrines. TPS are expected to pay for their own gasoline when they go out on supervision, and mainly receive compensation for the **quantity** of latrines in their catchment area. The MOH pays traditional birth attendants a small fee for referring pregnant women to the health center for delivery, but the CSP does not pay anything to volunteers who do the same thing. The CSP has given annual gifts to the CG volunteers: umbrellas and jerry-cans. The income-generating activities implemented since midterm have been an effective substitute for direct compensation and have decreased volunteer turnover.

5. Project Resources:

Human resources: Hiring generalists to be trained as health promoters was an effective strategy, in light of the current lack of MOH personnel in rural areas. Initially, nurses were selected, but their skill level was greater than needed for CBB and PD-Hearth. The CSP hired a public health nurse with strong ties to MOH at the central level as the project trainer. This facilitated coordination in selection of key messages and use of IEC materials. Selecting and training female health promoters did increase gender equity. However, staff felt that some male promoters should be selected, because some women had difficulty learning how to drive a motorcycle, and because some needed to go to isolated areas which may not be as secure.

Logistics: Using motorcycles as a means of transportation for the health promoters facilitated their access to CG volunteers who worked in isolated areas. TPS would travel with the CSP health promoters thus cutting down on MOH costs. The project was able to help by making project vehicles available, during EPI campaigns, and also supplementing gasoline resources available to MOH district personnel. This resource sharing strengthened the collaboration between CSP and MOH, and was often mentioned by district and provincial health personnel during interviews.

Financial Resources: The final cost of the CSP was \$ 2,022,293 of which \$520,000 was a matching grant from WR with an additional \$2,923 in direct costs. The cost per beneficiary (WRA and U5 = 111,645)[WRA(49,718) and U5(24,376 (year 1) + 37,551(year 5))] was \$18.11. It is not foreseeable that MOH/B will be in the position to take on the logistical costs without external funding. The improved health of women and children is worth the investment.

6. Implementation Strategy: The project was implemented as designed, using two main strategies to improve health indicators – Care Groups and PD-Hearth. As post-conflict food insecurity still exists, the PD/Hearth nutritional strategy has empowered women to learn how to use the foods they have available in their own kitchens to provide additional feedings to their malnourished children. Demonstrating that they do not need to depend on outside sources to impact their children’s nutritional status not only makes a difference in immediate health outcomes, but also teaches women that this is a sustainable strategy.

7. Project household reach: Based on KPC data as well as project reports, over 80% of the targeted families were visited twice a month by CG volunteers who taught BCC messages.

8. Overcoming barriers: At midterm, financial sustainability at the local level was identified as a barrier to achieving project goals. Thus, income generating activities through credit associations were implemented in partnership with *Duturamane*, a local NGO. Another barrier is staff turnover as there is strong competition among NGOs to hire the few Burundians qualified to step into positions of leadership in project management. Internal capacity building became necessary, and, initially slowed down activities. However, quarterly training sessions of promoters have resulted in maintaining staff. Training of supervisors has been less deliberate.

Another barrier is how volunteerism is culturally perceived. In Kibuye, it is believed that it is good for someone to give of her/himself to the community, but then s/he must also return with something for her/his family. The volunteer must not come home with empty hands; the family should also benefit. At midterm, CG volunteers were returning home with empty hands, and, it was perceived that their families were not better off than before. Husbands were reluctant to allow their wives to be part of CG as they came home with empty hands. COSA and *nyambakumbi* met with reluctant husbands. The income generating activities were an effective cultural response to volunteers' needs, and contributed to community development.

9. Sustained Behavior change: Vital to behavior change is on-going encouragement. This occurred as part of the overall project design as health promoters encouraged CG volunteers to learn new messages and implement new health behaviors. CG volunteers in turn encouraged their neighbors by visiting them twice a month. As one mother put it, *"I never know when the volunteer is going to come, so I make sure to keep my home clean"* Another stated, *"I thought all of these matters were only for educated people. Now I know this if for me and my children."* Another remarked, *"Now even my husband makes sure that there is water in the tippy-tap."* The strong quantitative results for PD-Hearth show how effective on-going encouragement was in maintaining weight gain among moderately malnourished children.

Role of Key Partners

| Partners | Role in Project | Result of Collaboration |
|--------------------|--|--|
| Ministry of Health | Commune-level data analysis | Commune: joint data analysis has been strengthened between head nurses and WR promoters |
| | District level supervision | District: Joint field supervision has been sporadic (WR supervisors and TPS). Joint data analysis occurred quarterly between CSP staff and MOH district supervisors. Suggestion: Schedule field supervision trips such that TPS and WR supervisors can make them jointly. Plan joint data analysis at district level between MOH district staff and WR project staff. |
| | Provincial level oversight Central level: national guidelines | Provincial: WR project staff have not yet implemented a mechanism to meet with MOH provincial medical director. Recommendation: As there are quarterly meetings of all NGOs with the provincial medical director, attend these meetings. The CSP has had a consistent project manager over last 2 years of the project This has led to increased interactions with |

| | | |
|--|---------------|---|
| | | central MOH personnel such that he was involved in preparing tools and training of personnel in provinces where community-based treatment for fever has been implemented. |
| Concern Worldwide and Catholic Relief Services | Not directly | Sharing of lessons learned so that the CG strategy is effective in other districts in Burundi. |
| WHO | Central level | Has spear-headed community-based malaria treatment. Have visited the project to learn more about strategies being implemented. |
| UNICEF | Central level | Have also used PD-Hearth and advocated for it to become a national strategy. |

Overall Design Factors That Influenced Results

Contribution to Global Learning

The project's goal is to achieve significant and sustained reductions in mortality and morbidity among children under five years' of age and women of reproductive age in the Kibuye Health District and as such reflects the Global Health Initiative and MCHIP priorities. Specific factors described earlier need to be considered when replicating or scaling it up.

Social and behavior change activities: The project was designed using a Community Integrated Management of Childhood Diseases (C-IMCI) using a Care Group Model. This model fosters community mobilization by empowering women to learn new health behaviors and then to teach them to their neighbors. In addition, the PD/Hearth strategy to help malnourished children regain lost weight builds on local resources and thus encourages sustainability as women learn how to combine foods that they already have in their kitchen. Together with COSA and *chefs de colline*, CSP health promoters mobilized communities to implement new health behaviors, for example, to participate in mass vaccination campaigns or to go to the nearest health center when a child had a danger sign. Not only did the CG model empower women, but it also has fostered community unity which is vital to rebuilding a nation post conflict. One particularly poignant comment was made by a beneficiary, “*Before the project came, if I heard that one of my neighbor’s children was sick, I did nothing. Now, I go to see how I can help.*”

Community partnership building: Religious leaders who also participated in CG activities were intentional in including BCC messages in their religious activities. They repeatedly spoke of how encouraging it was to them to meet with other pastors and participate in joint community events. Strong partnerships were created between the health promoters and COSA, so that they jointly planned and implemented community activities.

Strategies to increase access to health, including gender and health equity:

The Care Group model has increased access to health services per the KPC and qualitative data. At the health center level, data indicated that more women were delivering there. At the district hospital, cases of severe malaria had dramatically dropped. Also, focus group respondents indicated that there were fewer cases of diarrhea, and that children in the PD/Hearth program

gained weight more rapidly in two weeks than they did in the nutritional recuperation sites (several months).

The types of equity being addressed by this project are first and foremost *socioeconomic* as poverty has been linked worldwide with a decrease in access to health care whether preventive or curative. Burundi is one of the poorest countries in Africa and has an agrarian economy, with most families being subsistent farmers. Because of the civil war, there has also been food insecurity. Another area of equity which has been addressed is *ethnic identity*. People of the Batwa tribe are often marginalized, have historically not participated in community activities. The Care Group model has been successful in integrating this tribe in behavior change.

Although the CSP did not specifically measure improvements in equity, qualitative data indicates that women are more active in community events now that they do not need to focus as much on their children's illnesses. Some of the CG volunteers have even been elected COSA members.

Capacity building for CHWs, CSP promoters, and involvement of MOH staff:

Community Health Workers are part of MOH personnel and receive a small stipend for their community outreach activities. They are trained to teach BCC messages and to collect data which they then report to MOH TPS. In Kibuye District, CHWs have been included in CG volunteer training, and several female CHWs have also become CG volunteers. CHWs who have participated in Care Group meetings have honed their health education skills and data collection. The Care Groups have also provided a setting for strengthening community development.

CSP health promoters: Most of the individuals hired by the CSP were generalists. Hiring generalists as promoters instead of health personnel is important because generalists have a community development background which has facilitated creating partnerships at the *colline* and *commune* levels. The CSP Promoters were trained in participatory methodologies. Deliberate and frequent in-service training, in addition to performance-based supervision provided these generalists with the skills they needed to mobilize communities, train and supervise CG volunteers, and collect and interpret health data. By the end of project, they were filling the role of TPS due to this training and their field experiences.

MOH district staff participated in training CSP health promoters and thus strengthened their training skills. CSP staff have also benefited from conflict resolution training during the project which has provided them with team building skills.

Human resources strategies: The bi-weekly CG training/supervision meetings that are organized by the CSP health promoters were an ideal setting for reinforcing prior health messages learned by the volunteers, for problem-solving situations the volunteers faced as they educated their neighbors, and for collecting health data (morbidity and mortality) more extensively and in a timely manner.

On-going attention was given to monitoring and evaluation skills of CSP staff at the district level, and, appropriate tools were developed. Having technical support readily available thru the project manager and WR/B was essential to maintaining the quality of M & E. Access to the internet is sporadic in Kibuye but was more available in Gitega, the provincial capital

Health system strengthening/ scaling up: Kibuye District is being cited as an example on how to improve indicators by provincial MOH staff. The CG model extended the CHW sphere of influence in communities. Structurally, there are only 2 CHW per HC. By training volunteers to

teach BCC and to collect data, significant behavior change has occurred as they were able to visit each home twice a month. Training generalists as health promoters extended the work sphere of the TPS, and ensured that volunteers were being trained and supervised twice a month. In order to sustain the CG model, it will be vital that income generating activities be incorporated from the beginning of new projects, not only for volunteers but also for health promoters.

Quality assurance: Health promoters have reviewed previously taught health messages twice a month with CG volunteers. This ensured consistent messages across all Care Groups. When the promoters were trained about diarrhea, they then used the KPC questions for this intervention to monitor whether volunteers were correctly collecting data, as well as giving community members the correct messages. Using IEC materials available at the national level also resulted in a harmonization of content, for example in family planning.

Information management system strengthening: Care Group volunteers are collecting household data every two weeks; CHWs are too limited (in number) to accomplish this. This has led to more timely information about potential health crises occurring. CG presidents verbally report the health data during the bi-monthly meetings. The health promoters use a standard reporting tool to tally the data. If a CG volunteer is absent from a meeting, the health promoter goes to their home to collect the information as well as to review the health messages which are to be given. The promoters' reports are reviewed with HC staff (head nurse and TPS). These reports are summarized by the CSP supervisors who then report their findings to CSP management. The CSP manager reviews this data with MOH district personnel quarterly.

Policy dialogue and advocacy at the local and national levels: Community Health Workers (CHW) who represent the MOH's delivery of services at the village level have participated not only in the supervision of volunteer activities, but in many cases have also become active members in the Care Groups. At the commune level, CSP promoters worked side by side with health center head nurses to analyze data collected by CG volunteers. At the district level, WR and MOH staff also reviewed the data analysis. At the national level, WR staff shared ideas with other NGO staff members, and also kept MOH personnel abreast of progress made. Because of this intentional collaboration, the project manager was invited to help MOH develop tools for CBM of fever (malaria) and to train personnel in other provinces where treatment kits were available. This sharing of project results has also contributed to the MOH decision to use PD-Hearth as a national strategy for managing mild-to-moderate malnutrition.

Dissemination and Information Use

Both at the midterm and final evaluations, the consultant and the evaluation team presented the preliminary results of the evaluation at the Ministry of Health. The event was attended by representatives from MOH and USAID, as well as other NGOs and WR staff.

Several NGOs are using Care Groups in their programs in Burundi. (Note, these are not just Child Survival Projects, but also Multi-Year Assistance Programs funded by USAID's Food for Peace Office). Since September 2012, these NGOs have formed an informal Care Group Working Group in Burundi to share experiences and articulate shared principles with which to advocate with the MOH and the donor community. WR has presented a summary of the evaluation results with this Working Group. The WG includes CRS, International Medical Corps (IMC), Food for the Hungry, Concern Worldwide, World Relief, as well as representatives from

USAID's Food for Peace Office. As indicated earlier, all midterm recommendations were implemented except for those requiring substantial additional funding. The challenges that CSP staff identified, how they have been resolved, as well as World Relief's programmatic experience with Care Groups will continue to make important contributions to the replication of this model. Concern Worldwide Burundi and Catholic Relief Services have also adopted the Care Group model for their CSP. USAID/Burundi held a donor meeting FY2012 to facilitate the dissemination of these results.

G. Conclusions and Recommendations

The project design has been effective per quantitative and qualitative data at midterm and final assessments. The two main strategies of using the Care Group model to promote behavior change, and PD-Hearth for mild-to-moderate undernutrition contributed to the successful outcomes. There has been an increase in key indicators since baseline data was collected, with some indicators more than doubling. More mothers wash their hands at the appropriate times and give more and appropriate fluids to their children who have diarrhea; feeding practices have improved whether breastfeeding, adequate feeding or catch-up growth after following the PD/Hearth strategy; more families have LLIN and have used them in the weeks prior to the KPC survey; vaccination coverage has exceeded project targets; and mothers recognized at least two signs of needing to seek care for their child.

Recommendations to the MOH

1. Officially recognize the Care Group structure and continue to involve Care Group volunteers in health activities in their communities.
2. Adopt the Care Group model and its emphasis on partnering with existing community groups (COSA and *chefs de colline*) as a community health strategy in order to increase coverage and reach the greatest number of beneficiaries.
3. In light of the positive results (quantitative and qualitative), duplicate this project in other districts.
4. As PD-Hearth has been designated as a national strategy for mild-to-moderate undernutrition, ensure that NGOs who are planning on creating/implementing nutrition programs also follow the PD-Hearth strategy.
5. Implement a community HIS which incorporates all community health programs.
6. Accelerate the assignment of TPS to all health centers in order to facilitate supervision of community liaison volunteers (COSA, *chefs de colline* and CG volunteers).
7. Implement Community Case Management (CCM) so that CHWs are able to treat diarrhea (ORS and zinc), fever (malaria) and pneumonia.
8. Include potable water as a PBF community indicator, for example the use of Manz filters.
9. Schedule as soon as possible another community distribution of LLINs in addition to those already being distributed to pregnant women and children receiving their measles vaccine.
10. In order to build on the CSP health promoters' capacity and to scale-up the CG and PD-Hearth models, create a refresher course for them that would lead to a TPS certificate and could grand-father them in to the current open TPS slots. Open another TPS school in order to decentralize training in a provincial capital. As Gitega has had the experience of

CSP health promoters in Kibuye District, this setting would provide field experience in a context where community mobilization has been successful.

The latter two recommendations grew out of discussions after the MOH debriefing and will need to be discussed with them as to their feasibility.

Recommendations to the Grantee

1. Continue to collaborate with HC staff, in particular TPS, in the supervision of CG volunteers in view of maintaining the strong results.
2. Continue to integrate PD-Hearth when replicating this project.
3. Incorporate income generating activities from the beginning when replicating this project.
4. Finalize the CSP salary structure review and align it with that of other NGOs as a strategy to retain personnel. In order to compensate for the fluctuation in the Burundi franc, set salary levels in US dollars, rather than in francs.
5. Include professional development in job descriptions and performance reviews.
6. Include in future CSP the supplies and treatment kits necessary to provide community-based interventions.
7. As these results need to be disseminated, complete and present findings from CG and PD-Hearth.

Recommendations to USAID/Burundi

1. If the inclusion of project coordination and monitoring as MOH performance criteria is not foreseeable, negotiate with NGOs funded by USAID so that a unified approach can be implemented in partnering with MOH personnel.
2. Include in the USAID country plan the oversight of child-survival projects which are centrally-funded.
3. As MOH has not yet determined whether community-based distribution is to occur, explore strategies to improve access to ORS packets at the *colline* level, increase bed-net availability, and promote zinc and anti-malarial drug management at the community level with NGOs involved in child survival programs.
4. Strongly recommend to NGOs seeking USAID funding for child survival project that a line item be included for supplies such as ORS and malaria treatment.
5. As there is only one national TPS school, collaborate with other multi-lateral donors to create a second TPS school in order to increase community coverage and mobilization for BCC.

Annex 1: Learning Briefs

'Light Mothers' and Positive Deviance/ Hearth model to Improve Weight Gain: A USAID nutrition program is adopted as a model for the Burundi MOH to address high levels of undernutrition in children.

Burundi is a country with a thousand hills, and has been responding to post-conflict challenges for the last five years, transitioning from disaster relief to rehabilitation and development. One significant challenge is the access to health education and preventive care. Burundi's estimated infant mortality rate in 2007 was 156 per 1,000 live births and the under-five mortality rate was 231 per 1,000 live births. Malaria accounted for almost half of child deaths nationwide; malnutrition was the second leading cause of death. Forty-one percent of rural children under

five years were underweight. “Burundi’s health indicators are among the worst in the world, with a life expectancy of 50 years and a child mortality rate of 166 deaths per 1,000 live births. Burundi remains one of the poorest countries in Africa, if not the world. Its per capita GNI (2010) was \$150 (source: IBRD). Burundi ranked 166 out of 169 countries on the 2010 UN Human Development Index. Burundi is also one of the world’s 40 “Heavily Indebted Poor Countries (HIPC)” – defined as developing countries with high levels of poverty (68% in Burundi’s case) and substantial foreign and domestic debt overhang”, (USAID, Global Health Initiative, 2011-2015) Respiratory tract infections, malaria, and diarrhea are the main causes of death in children. Over 80% of Burundi’s estimated 8.3 million people live on less than \$1.25 per day.

One health district, Kibuye in the Province of Gitega, about 4 hours’ drive from the capital city, Bujumbura, was selected as a site to improve health outcomes. The project’s goal was to achieve significant and sustained reductions in moderate malnutrition using the Positive Deviance/Hearth strategy in children under five.

CSP Program goals:

- 1) To significantly and sustainably reduce morbidity and mortality among children under-five and women of reproductive age.
- 2) To model a sustainable Community-Integrated Management of Childhood Illness (C-IMCI) implementation strategies for national scale-up.

Over the past five years, World Relief has established a network of almost 3,000 volunteers organized into care groups of 10 – 12 women and men. These volunteers are committed to transforming their own communities by promoting habits that nurture healthy mothers and children. These volunteers are supported by an additional 300 religious leaders who help reinforce the C-IMCI messages that the volunteers are sharing with their neighbors. One member of each care group, ‘light mother’, was trained to help mild-to-moderately malnourished children through the Positive Deviance/Hearth sessions (PD/Hearth).



PD/H is a community-based approach where groups of mothers rehabilitate their children together using locally available foods brought by the participants (not using outside resources). PD-Hearth builds caregiver’s skills and increases awareness of child malnutrition in the community. Children under three were weighed in order to identify those who were malnourished and those who were not. The strategy differs from many malnutrition programs in that, before implementing any health teaching, focus groups of mothers whose children were healthy (positive deviance) are conducted to determine how they were using local resources. These nutrition behaviors are then taught to the mothers whose children are malnourished over a 12 day period. Mothers and other community leaders contribute foods and fuel for the cooking sessions. Each child is then followed for at least two months by a ‘light mother’, responsible for 10 children. Children who are severely malnourished are referred to the closest health center.

In order to impact mothers who may have children at risk of moderate undernutrition, CG volunteers in cooperation with the 'light mothers' included the same advice when making home visits. These simple solutions were part of key health messages during community-wide meetings.

Results

This integrated approach significantly impacted nutritional practices even in families where children were not malnourished. **At baseline, 25.6% of infants and young children age 6-23 months were fed according to minimum appropriate feeding practices. After 5 years, 92.7% of the children surveyed were.** During in-home interviews, mothers enthusiastically shared that now they added extra nutritious foods to their children's meals, and instead of selling all of their eggs, they gave some to their children. **The level of mild-to-moderate undernutrition (-2SD from the mean) dropped from 16 % to 4.2%.** In addition to sustained weight gain, PD/Hearth also strengthens community cohesion. Local elected leaders were involved in organizing PD/Hearth sessions, and asked to be taught how to interpret the growth chart.

Lessons Learned: Initially, WR had trained all the volunteers on how to manage moderate malnutrition. However, this did not work for close monitoring of the children. It was more effective to train one CG volunteer as a 'light mother. As it is shameful in Burundi to have a malnourished child; it was important to celebrate successes in weight gains. Results were shared with each group of women. This encouraged mothers to continue the new practices.

Conclusions: Key to PD-Hearth is an effective community mobilization and the use of local resources. Post-conflict, families have had to depend on outside resources to survive. Women were at first reluctant to come with the foods available in their own kitchens, but grasped the concept of using what was available. As new behavior needs to be encouraged in order to become engrained, the frequent follow-up by the 'light mothers' was crucial to sustaining new behaviors. This shift from dependency on the outside to utilizing local resources empowered families to make simple changes. Positive Deviance – Hearth is an effective and sustainable strategy to promote weight gain in children with moderate malnutrition. The MOH of Burundi has determined that this strategy will now be implemented nation-wide

Preparing Religious Leaders in Gitega Province for Local Level Dialogue on Birth Spacing and Family Planning

Background

Burundi is at a key moment in its history for a new understanding and acceptance of family planning. In December 2010, the President of Burundi, Pierre Nkurunziza, called for a meeting with key religious leaders to discuss family planning and reproductive health. In the “Gitega Declaration” that emerged from this meeting, religious leaders recognized Burundi's demographic challenges and the economic and social consequences for coming generations if they were not addressed.

A significant factor in Burundi's high maternal mortality ratio (499 per 100,000 live births) and infant mortality rate (59 per 1000 live births) is early and closely spaced pregnancies. The fertility rate is 6.4 children per woman while the rate of modern contraceptive use is 18% (2010 DHS). Burundi's population growth is estimated at 2.4%, which has

far-reaching consequences. For example, escalating demand for farmland leads to land disputes, which are the main legal issues for an overwhelmingly agrarian population; 9 inhabitants out of 10 are farmers. In Kibuye district, where WR has been implementing a USAID Child Survival program, prior to the Flex Fund grant, the modern contraceptive use rate was 8%, and there was a 53% unmet need for family planning services. In 2011, WR learned about Flex Fund grants to add Family Planning to existing grants, and WRB leadership recognized this was a timely opportunity for the work in Kibuye. From WR's experience of working with Church leaders in HIV/AIDs programming, staff realized that a two-pronged approach of honest communication among Church leaders (who in turn could provide consistent messaging), along with improved household access through approved MOH CHWs and WR Care Group volunteers, would be the most effective.

There are a variety of challenges that hinder the expansion of family planning services. Cultural factors contribute to a preference for male babies. Religious and cultural beliefs often discourage families from considering the questions of birth spacing and family planning. Rumors and misinformation about birth spacing and family planning also pose a challenge, particularly in a context where the literacy rate is only 55%.

The Gitega Provincial Workshop

World Relief, in partnership with the Ministry of Public Health and with funding from USAID/World Learning, held a day-long workshop on September 20, 2012, to reaffirm the spirit of the Gitega Declaration amongst Gitega's local religious and administrative authorities. The workshop was part of the National Reproductive Health Week coordinated by the Ministry of Public Health.

The workshop was launched by the Governor of Gitega Province in the presence of the Director General of the Ministry of Internal Affairs and the USAID Country Representative. The participants included:

- 7 Members of Parliament,
- 29 religious leaders from the various communes of Gitega Province,

“We affirm our commitment to support and assist the Government's efforts in seeking lasting solutions in a comprehensive and effective manner, respectful of human and religious values.”

- The Gitega
Declaration

- 21 province and commune administrative leaders,
- 7 Ministry of Public Health officials from the Province and Health Districts in Gitega.

In the opening speech, the Governor stated that family planning was a real issue in Burundi and that it was high time the authorities worked in synergy with all community partners. The Director General of the Ministry of Internal affairs gave the overview of demography issues nationwide. The Director of the National Program for Reproductive Health in the Ministry of Health then took the floor emphasizing on the role of the church in dealing with this issue. The USAID Country Representative then assured that USAID will continue to support the Government of Burundi's Maternal and Child Health Programs through the PEPFAR program. Finally, the Bishop of the Anglican Church in Gitega Province affirmed the need for churches to encourage parents to take responsibility for their reproductive health decisions, taking into consideration the well-being of mothers and the children. He gave the views of the Anglican Church on family planning - encouraging couples to consider medical advice and their consciences when choosing the family planning method that is right for them.

The workshop included some time for dialogue amongst the diverse range of participants. The recommendations given by the participants included:

- Integrating principles of family planning into civil wedding ceremonies;
- Raising the legal age for marriage;
- Organizing awareness workshops for couples on limiting / spacing births;
- Increasing frequent collaboration between the authorities and the churches to reach a consensus to avoid contradictions in their messages to the community;

Following Up at the Local Level

The primary purpose of the workshop was to bring together various leaders from the local level – health officials, administrative authorities, and religious leaders – to discuss the importance of birth spacing and family planning. The one-day workshop was designed to lay the groundwork for a series of dialogues that would take place in the communes – at the local level – about these issues. By bringing together leaders from these various institutions, the workshop increased the odds that these local-level discussions would be successful.

Since the workshop on September 20, World Relief has conducted local level workshops, one in each of the four communes of Kibuye Health District, the target district of the project. These have been attended by over 130 religious and community leaders (approximately 30-40 in each). Combined with the birth spacing and family planning messages being disseminated through the network of 209 Care Groups in Kibuye, these workshops are expected to gradually change opinions and behavior in Kibuye for the benefit of thousands of mothers and children.

Already, in just the few months since WR was awarded the Flex Fund grant, the final KPC has shown an improvement in the Family Planning use rate from **16% at baseline to 50% at the final KPC (42.7% using a modern method)**.

Annex 2: List of Publications and Presentations Related to the Project

None to date

Annex 3: Project Management Evaluation

Planning:

Since the creation of this CSP, there has been a commitment to joint-planning with partners at all levels. This is clearly evident in the DIP, as partners such as Public Health Specialist in the Directorate of Health Programs and Services in the MOH, Gitega provincial health personnel, UNICEF, WHO, CordAid, International Medical Corps, Population Services International, HealthNet-TPO, the Free Methodist Church, and Food for the Hungry, as well as Kibuye Hospital (p. 133). Input was also sought from USAID/Burundi and USAID/Kenya. This commitment has continued as CSP staff has interacted with their MOH counterparts at the district level in planning joint strategies and, at the ward and *colline* levels as health promoters worked alongside COSA and TPS in implementing activities. This joint planning was especially noted by individuals at all levels during the final evaluation interviews, for example, the quarterly work plans for COSA include not only the C-IMCI activities but also identify the health promoters' and CG volunteers' roles (see Annex 15).

Because of this attention to interfacing frequently with partners, the DIP work plan was practical as demonstrated by KPC final results. However, certain gaps did occur because of assumptions made in preparing the DIP. This first assumption was that qualified personnel would be easily hired in Burundi. Because this project was implemented in a post-conflict period, there was strong competition among NGOs for the limited number of qualified personnel. This led to frequent staff turnover in the CSP. In order to fill this gap, individuals from other countries were hired for key administrative positions. Also, generalists were hired and trained to supervise CG volunteers (this latter decision proved to be effective in that there was less field staff turnover). Another assumption was the MOH would decide to implement and continue community-based distribution of ORS packets and zinc for the in-home treatment of diarrhea, and anti-malarial treatment. This however only occurred during the first two years of the project. MOH decided only to make these items available at the health center level.

While commendable that USAID was willing to fund this CSP for five years, this time frame is unrealistic when sustainability, capacity building and scale-up are also goals in the context of post-conflict development. At the community level, families are struggling with poverty and volunteers have limited resources. This was compensated by creating income generating activities during the last 2 years of the project. At the national level, there is a shortage of qualified health personnel, especially in rural areas. There are many nursing schools both public and private, but only one for TPS who are the most indicated to work within a community mobilization model. Training generalists to assume training and supervision of CG volunteers was an effective response to the lack of personnel. However, without additional funding until

sufficient TPS are trained, the CG model may be jeopardized. COSA have indicated that they will come alongside TPS in the supervision of CG volunteers.

Supervision of Project Staff: This component of the project has been significantly strengthened since the midterm evaluation as the same project manager has been overseeing activities. CSP supervisors use an evaluation tool to provide formative feedback quarterly to the health promoters. During a weekly meeting, supervisors review with the project manager, training officer and M& E officer any problems mentioned by field staff, and analyze indicators which are not progressing. The solutions are then discussed with COSA and local ward administrators. There is also a yearly summative evaluation for all personnel. Recently, as the majority of personnel received an “exceptional” rating which would have resulted in salary increases, the country director determined that the evaluation tool needed to be revised.

Human Resources and Staff Management: Hiring requests are generated by the supervisor of a project or department. The HR director prepares a job description with details of tasks. The new opening is then advertised by radio or through the newspapers. The hiring committee reviews all applications and interviews qualified candidates with particular attention to their personal values. New staff has a 3 to 6 month orientation after which they are evaluated. A standardized performance evaluation form is used to determine whether the individual has been able to fulfill his/her job description. Other staff members have an annual performance evaluation. The personnel manual describes the overall evaluation process.

In order to cover maternity leaves, an additional five individuals were hired for the last 6 months of the project. They and another five promoter positions have been terminated. Among the five promoters who are being let go, two did not meet performance expectations, and 3 due to a change in funding.

Financial Management: WR/USA manages the technical support budget. The WR/Burundi chief accountant uses Quick Books to send monthly reports to WR/USA thru the internet. WR/Nicaragua provides technical support for the financial system. The only incident in 2012 which slowed down the transfer of funds from the US to Burundi was due to a change in the intermediary banking partner in the US. Accounts have been set up for on-going expenses such as the purchase of gas or office supplies. Invoices are then generated by local businesses on a monthly basis for payment. A monthly expense report is finalized by the 5th of each month,. However, there is often a delay in receiving receipts and other documentation from the project site in Kibuye.

.A bank account has been set up in Gitega for ease in obtaining funds. WR/Burundi has a book-keeper in the project office in Kibuye who manages pre-approved expenses through a voucher system and has a petty cash of 100,000 BF to cover small expenses. As most of these funds are used to cover medical expenses, the petty cash amount needs to be renewed frequently.

Evaluation: The current system appears to follow best practices in accounting.

Recommendations: The CSP book-keeper recommended that, instead of increasing the amount in petty cash, a voucher system be set up with local pharmacies so that the petty cash would not be used chiefly for those expenses. Explore the barriers in transmitting project receipts in a timely manner, perhaps by authorizing project personnel to hand-deliver them to Bujumbura.

Logistics: After 5 years of use, the vehicles and motorbikes are requiring more repairs, and thus that budgetary line item needed to be adjusted. The district project driver has been frequent called upon to repair the bikes even though he is not a mechanic. Staff use gas coupons, and the motorbikes are not kept in the field but returned to Gitega office for the weekend. Promoters who do not know how to drive a motorcycle hire someone to drive them at their own expense. Promoters also need to share motorbikes which impacts field activities. Providing cellphones to each promoter has greatly improved communication between team members. However the network is somewhat limited. **Recommendations:** When duplicating this project, increase the budget line item for repairs in the 4th and 5th years. For the current project, set up a voucher system with a reputable motorbike mechanic so that repairs are completed in a timely manner. Purchase additional motorbikes so that promoters are freer to go out into the field or hire motorcycle drivers to facilitate the use of the equipment. Explore the possibility of increasing the cellphone network so that better access is available in remote areas.

Information Management: The data collection system was effective and was used to make timely decisions by project staff. CG volunteers verbally reported key data to health promoters, and TPS collected data directly from CHWs. These reports were then reviewed and signed by the appropriate health center nurse before being analyzed jointly by project and MOH district staff. Project results were also presented during the provincial quarterly meetings so that additional decisions could be made if needed. For example, the district data indicated that vaccination coverage was very low. However, data from CG volunteers indicated otherwise. Project staff was proactive in following up “lost” children. It was discovered that these children were up to date, but that their vaccination status had not been registered at the health centers. This discovery then led to discussions on how to improve EPI data collection.

Local ward administrators, COSA and *chefs de colline* indicated during their interviews that they were regularly informed of project results, as did MOH district and provincial personnel. COSA also used project information in preparing their quarterly work plans.

Technical and Administrative Support: The technical support provided by WR/USA and WR/Rwanda was in the areas of program management and M & E. The technical advisor from the US visited the project annually and was available by phone and internet to provide timely guidance. WR/Rwanda travelled several times to provide M & E oversight. Financial technical support was provided by WR/Nicaragua, and, an advisor was onsite at the end of the project to provide in-service training to the chief accountant and to address concerns. WR/USA did not have on staff someone with training and IEC expertise to provide guidance during the development of training materials. CSP staff modified what was available through MOH. Initially, health promoters received the same training as CG volunteers. However, after midterm, more emphasis was given to supervision training.

As Burundi is a limited impact USAID country, few staff available for field visits. Only 2 field visits were scheduled during the 5 years. However, USAID personnel were available for briefing meetings and responsive to requests for assistance, for example, in obtaining the latest DHS report.

Management Lessons Learned

It is crucial to involve partners from the beginning of planning a new project. This involvement not only insures clarity in determining program goals and activities, but contributes to local and district buy-ins by host country nationals.

In a post-conflict situation, more attention needs to be made to capacity building especially when there are few qualified individuals for hire.

In a post-conflict situation, the project time line needs to be greater than 5 years in order to build capacity, grow sustainability, and, ensure that results can be scaled up.

The incongruity of seeing a health promoter using a cellphone in a remote area to get back-up highlights the need for management systems to be intentional in using such technology in developing systems.

NGOs in a given country need to negotiate joint salary structures so that they do not repeatedly experience staff turnover due to competition.

Key to the success of CG and PD-Hearth is ongoing supervision to encourage behavior change. Child survival activities must not be seen as a stand-alone program. Incorporating income generating activities provides families the needed resources to put into practice new behaviors, and, foster community development.

Annex 4: Work Plan Table

| Objective and Major Activities | Objective Met | Activity Status | Changes |
|--|---------------|-----------------|--|
| <i>Improve linkages between households, communities and the formal health system.</i> | Met | | |
| Project Design, Planning and Start-Up | | | |
| Incorporate feedback from technical and budget proposal review | | Completed | |
| Negotiate and sign cooperative agreement | | Completed | |
| Contact/consult with USAID mission | | Completed | |
| Contact/meet with key national level contacts at MOH, UNICEF, WHO | | Completed | |
| Secure formal agreements with MOH | | Completed | |
| Contact governmental leaders of collaborating communities (District, Commune, Colline) | | Completed | |
| Contact collaborating health facilities (Kibuye Hospital and Health Centers in Kibuye Health District) | | Completed | |
| Purchase vehicles | | Completed | |
| Furnish project office and guest house | | Completed | |
| Purchase office supplies and equipment | | Completed | |
| DIP Preparation | | Completed | |
| Management of Project Personnel | | | |
| Recruit and hire Project Manager, Training Officer and M&E Officer | | Completed | Staff turnover |
| Recruit and Hire Supervisors and Promoters | | Completed | A total of four supervisors and 23 promoters were trained in response to staff turnover. |
| Recruit and Hire Support Staff | | Completed | |
| Quarterly Planning with Supervisors and Promoters | | Completed | |
| Supervision of Promoters using Performance Checklists | | Completed | |
| Weekly Monitoring/Discussion Meetings with Promoters | | Completed | |
| Selection of Volunteers for Mother and Pastoral Care Groups | | Completed | A total of 3,118 volunteers were trained: 2853 CG |

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|---|-----|-----------|---|
| | | | volunteers and 265 lay religious leaders |
| Formation of Care Groups | | Completed | |
| Training and Supervision of Care Groups | | Completed | |
| Distribute Annual Incentives to Volunteers | | Completed | |
| Care Group "Graduations" | | Completed | |
| Creation of credit associations and income generating activities | | | As the concept of volunteerism is coupled with benefits to one's family, creating these associations stabilized turnover. |
| Curriculum and Teaching Materials Development | | | |
| Develop curricula/teaching materials for CDD | | Completed | |
| Develop curricula/training materials for Nutrition I | | Completed | |
| Develop curricula/teaching materials for Nutrition II | | Completed | |
| Develop curricula/training materials for Immunization | | Completed | |
| Develop curricula/teaching materials for PD/Hearth | | Completed | |
| Develop curricula/teaching materials for Malaria | | Completed | |
| Develop curricula/training materials for HBM | | Completed | |
| Develop curricula/training materials for Financial Mgmt Training | | Completed | |
| Prepare and print teaching materials | | Completed | |
| Review and update of curricula and teaching materials | | Completed | |
| Develop curricula/teaching materials for Family Planning | | Completed | This aspect of PHC was added in the last 6 months of the project as a strategy in scaffolding activities. |
| <i>Improve availability and access to essential health commodities at the community level.</i> | Met | | |
| Training Sessions | | | |
| Supervision seminar for CSP Supervisors | | Completed | |
| Driver Education and Motorcycle Licensing | | Completed | |

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|---|-----|--|--|
| Orientation of HC Staff and COSAs | | Completed | |
| Promoter Orientation (covers participatory methods/adult education & community mobilization) | | Completed | |
| Survey Training & Refreshers | | Completed | |
| Conflict Resolution Training & Refresher | | Completed | |
| CDD Training Camp | | Completed | |
| Nutrition Training Camp (in two sessions) | | Completed | |
| Immunization Training Camp | | Completed | |
| Financial Management & Accounting Training | | Completed | |
| Positive Deviance HearthTraining Camp | | Completed | |
| Malaria Training Camp | | Completed | |
| Family Planning Training Camp | | Completed | Scaffolding of activities: FP component was added in the 5th year of the project. |
| HBM Training Camp for Promoters (pending approval) | | MOH has decided not to implement CCM of diarrhea and malaria. ORS packets, zinc and anti-malarials are only available at the health center (HC) level. | CCM has been approved for Kibuye health district and with a grant from UNICEF, CBD is expected to begin in April 2013. |
| HBM Training for Distributors (pending approval) | | MOH has decided not to implement CCM of diarrhea and malaria. ORS packets, zinc and anti-malarials are only available at the health center (HC) level. | CCM has been approved for Kibuye health district and with a grant from UNICEF, CBD is expected to begin in April 2013. |
| Sensitize PDSs, THs and TBAs about danger signs and care seeking through small community level meetings | | Focus was mainly on TBAs. | |
| Refresher training on control of diarrheal disease | | Complete | |
| Refresher training on nutrition | | Complete | |
| Refresher training on malaria | | Complete | |
| <i>Increased knowledge and adoption of key family practices for child health by child caregivers with support from community leaders and health providers.</i> | Met | | |
| Introduction of Child Survival Interventions | | | |
| Control of Diarrheal Disease | | Complete | |

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|---|--|--|--|
| Nutrition | | Complete | |
| Vitamin A | | Complete | |
| Immunization | | Complete | |
| PD/Hearth | | Complete | |
| Malaria Prevention and Care-Seeking | | Complete | |
| Home-Based Management of Malaria (Pending Approval) | | MOH has decided not to implement CCM of diarrhea and malaria. ORS packets, zinc and anti-malarials are only available at the health center (HC) level. | CCM has been approved for Kibuye health district and with a grant from UNICEF, CBD is expected to begin in April 2013. |
| Baselines, Monitoring & Evaluation, Reporting | | | |
| Review/Planning Meetings with MOH and HN-TPO (quarterly) | | Completed | |
| Monthly Meetings with COSAs | | Completed | |
| Monthly and Annual Reporting | | Completed | |
| KPC Household Surveys | | Completed | |
| Complete Census of All WRA and Children Under Five | | Completed | |
| Health Information System Monitoring Surveys (Data Collection) | | | |
| Health Information System Monitoring Surveys (Analysis) | | Completed | |
| Community-Health Information System (Data Collection) | | Completed | |
| Community-Health Information System (Analysis) | | Completed | |
| Annual Retreat (Internal Evaluation) | | Completed | |
| Midterm and Final Evaluations | | Completed | |
| Implement Midterm Recommendations | | Completed | |
| Technical Assistance and Trips | | | |
| Managers and key partners visit CSP Umucyo site in Rwanda | | Completed | |
| Visits by World Relief Rwanda Staff | | Completed | |
| Visits by World Relief HQ Technical Advisors | | Completed | |
| Participatory Methods Trainer | | Completed | |
| Conflict Resolution Trainer | | Completed | |

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| | | | |
|--|--|-----------|---|
| PD/Hearth trainer | | Completed | |
| M&E Consultant for C-HIS start-up | | Completed | |
| Financial Management Training | | Completed | Local NGO provide TA to help CGs develop their own credit associations or begin income generating activities. |
| Duturamane support in creating credit associations | | Completed | |

Annex 5: MCHIP Rapid Catch Indicators

Standard Project: Burundi - WRC - FY2007 (2007-2012)

Rapid CATCH Indicators: Final Evaluation

Status: ✓OK

Date Last Updated: 2012-09-10 21:59:14.807

Current Sample Type: LQAS

Current Location Type: Aggregated

Change the sample and location types on the [Rapid CATCH Summary](#) tab.

Instructions: Click on each indicator name to enter data for that indicator. Enter numerator and denominator only.

Percent and confidence interval will be automatically calculated.

[Display All](#)

- [Maternal TT Vaccination](#)

Description: Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child

Numerator: Enter the number of mothers with children age 0-23 months who received at least two tetanus toxoid vaccinations before the birth of their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Final Evaluation Indicator Table for Maternal TT Vaccination

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|---------------------------------|---------------------------------|-----------------------------------|--------------------------------------|
| <input type="text" value="93"/> | <input type="text" value="96"/> | <input type="text" value="96.9"/> | ± <input type="text" value="3.5"/> % |

- [Skilled Birth Attendant](#)

Description: Percentage of children age 0-23 months whose births were attended by skilled personnel

Numerator: Enter the number of children age 0-23 months whose birth was attended by a doctor, nurse, midwife, auxiliary midwife, or other personnel with midwifery skills

Denominator: Enter the total number of children age 0-23 months in the survey

Final Evaluation Indicator Table for Skilled Birth Attendant

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
|-----------|-------------|-------------------------|-------------------------------------|

± %

- [Post-Natal Visit to Check on Newborn Within the First 3 Days After Birth](#)

Description: Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth

Numerator: Enter the number of children age 0-23 months who received a post-natal visit within three days after birth by an appropriate health worker

Denominator: Enter the total number of children age 0-23 months in the survey

Final Evaluation Indicator Table for Post-Natal Visit to Check on Newborn Within the First 3 Days After Birth

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|---------------------------------|---------------------------------|-----------------------------------|--------------------------------------|
| <input type="text" value="86"/> | <input type="text" value="96"/> | <input type="text" value="89.6"/> | ± <input type="text" value="6.1"/> % |

- [Exclusive Breastfeeding](#)

Description: Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours

Numerator: Enter the number of children age 0-5 months who drank breast milk in the previous 24 hours AND did not drink any other liquids in the previous 24 hours AND was not given any other foods or liquids in the previous 24 hours

Denominator: Enter the total number of children age 0-5 months in the survey

Final Evaluation Indicator Table for Exclusive Breastfeeding

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|---------------------------------|---------------------------------|-----------------------------------|--------------------------------------|
| <input type="text" value="92"/> | <input type="text" value="96"/> | <input type="text" value="95.8"/> | ± <input type="text" value="4.0"/> % |

- [Infant and Young Child Feeding](#)

Description: Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Numerator: Enter the number infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Denominator: Enter the total number of children age 6-23 months in the survey

Final Evaluation Indicator Table for Infant and Young Child Feeding

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 89 | 96 | 92.7 | ± 5.2 % |

- [Vitamin A Supplementation in the Last 6 Months](#)

Description: Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother’s recall

Numerator: Enter the number of children age 6-23 months who received a dose of Vitamin A in the last 6 months (mother’s recall or card verified)

Denominator: Enter the total number of children age 6-23 months in the survey

Final Evaluation Indicator Table for Vitamin A Supplementation in the Last 6 Months

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 87 | 96 | 90.6 | ± 5.8 % |

- [Measles Vaccination](#)

Description: Percentage of children age 12-23 months who received a measles vaccination

Numerator: Enter the number of children age 12-23 months who received a measles vaccination by the time of the interview as seen on the card or recalled by the mother

Denominator: Enter the total number of children age 12-23 months in the survey

Final Evaluation Indicator Table for Measles Vaccination

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 93 | 96 | 96.9 | ± 3.5 % |

- [Access to Immunization Services](#)

Description: Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother’s recall by the time of the survey

Numerator: Enter the number of children age 12-23 months who received a DTP1 at the time of the survey according to the vaccination card/child health booklet or mother’s recall

Denominator: Enter the total number of children age 12-23 months in the survey

Final Evaluation Indicator Table for Access to Immunization Services

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 93 | 96 | 96.9 | ± 3.5 % |

- [Health System Performance Regarding Immunization Services](#)

Description: Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey

Numerator: Enter the number of children age 12-23 months who received DTP3 at the time of the survey according to the vaccination card/child health booklet or mother's recall

Denominator: Enter the total number of children age 12-23 months in the survey

Final Evaluation Indicator Table for Health System Performance Regarding Immunization Services

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 92 | 96 | 95.8 | ± 4.0 % |

- [Treatment of Fever in Malarious Zones](#)

Description: Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began

Numerator: Enter the number of children age 0-23 months with a febrile episode in the last two weeks AND whose mother/caretaker sought treatment for the child within 24 hours AND who were treated with an appropriate anti-malarial drug

Denominator: Enter the total number of children age 0-23 months with a febrile episode in the last two weeks

Final Evaluation Indicator Table for Treatment of Fever in Malarious Zones

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 91 | 96 | 94.8 | ± 4.4 % |

- [ORT Use](#)

Description: Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids

Numerator: Enter the number of children age 0-23 months with diarrhea in the last two weeks AND who received oral rehydration solution (ORS) and/or recommended home fluids

Denominator: Enter the total number of children age 0-23 months who had diarrhea in the last two weeks

Final Evaluation Indicator Table for ORT Use

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 86 | 96 | 89.6 | ± 6.1 % |

- [Appropriate Care Seeking for Pneumonia](#)

Description: Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Numerator: Enter the number of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Denominator: Enter the total number of children with chest-related cough and fast and /or difficult breathing in the last two weeks

Final Evaluation Indicator Table for Appropriate Care Seeking for Pneumonia

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 94 | 96 | 97.9 | ± 2.9 % |

- [Point of Use \(POU\)](#)

Description: Percentage of households of children age 0-23 months that treat water effectively

Numerator: Enter the number of households of mothers of children 0-23 months that treat water effectively

Denominator: Enter the total number of households of children age 0-23 months in the survey

Final Evaluation Indicator Table for Point of Use (POU)

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 31 | 96 | 32.3 | ± 9.4 % |

- ☑ [Appropriate Hand Washing Practices](#)

Description: Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing

Numerator: Enter the number of mothers with children age 0-23 months who live in households with soap at the place for hand washing

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Final Evaluation Indicator Table for Appropriate Hand Washing Practices

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 87 | 96 | 90.6 | ± 5.8 % |

- ☑ [Child Sleeps Under an Insecticide-Treated Bednet](#)

Description: Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night

Numerator: Enter the number of children age 0-23 months who slept under an insecticide-treated bednet the previous night

Denominator: Enter the total number of children age 0-23 months in the survey

Final Evaluation Indicator Table for Child Sleeps Under an Insecticide-Treated Bednet

| Numerator | Denominator | Percent [Calculated] | Confidence Interval [Calculated] |
|-----------|-------------|-------------------------|-------------------------------------|
| 67 | 96 | 69.8 | ± 9.2 % |

- ☑ [Underweight](#)

Description: Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)

Numerator: Enter the number of children 0-23 months with weight/age -2 SD for the median weight for age, according to the WHO/NCHS reference population

Denominator: Enter the total number of children age 0-23 months in the survey

Final Evaluation Indicator Table for Underweight

| Numerator | Denominator | Percent <small>[Calculated]</small> | Confidence Interval <small>[Calculated]</small> |
|--------------------------------|---------------------------------|---|---|
| <input type="text" value="4"/> | <input type="text" value="96"/> | <input type="text" value="4.2"/> | ± <input type="text" value="4.0"/> % |

Enter comments:

Please enter any comments you have regarding your Rapid CATCH Indicator data, and include any information or variation from the standard definition of the indicator, such as different age cohort or denominator, and the reasons for the variation:

Annex 6: CHW Training Matrix

| Project Area (Name of District or Community) | Type of CHW | Official Government CHW or Grantee-developed Cadre | Paid or Volunteer | Number Trained over the Life of the Project | Focus of Training |
|---|---|--|--|--|--|
| Kibuye District | Female Care Group Volunteer which also included MOH CHW | Grantee-developed Cadre | Volunteer MOH CHWs are paid personnel | 3118 volunteers (2853 CG volunteers and 285 lay religious leaders) | BCC messages Data collection Management of danger signs for— <ul style="list-style-type: none"> • fever • malnutrition • diarrhea • family planning |
| Kibuye District | Health Promoters | Grantee-developed cadre | Paid | 23 | Supervision Data collection/analysis Technical and counseling skills. Re: <ul style="list-style-type: none"> • fever • malnutrition • diarrhea • family planning |
| Kibuye District | CSP supervisors | Grantee-developed cadre | Paid | 4 | Supervision Data collection/analysis Technical and counseling skills. Re: <ul style="list-style-type: none"> • fever • malnutrition • diarrhea • family planning |

Annex 7: Evaluation Team Members and Their Titles

| | |
|------------------------------|---|
| Paulette A. Chaponniere, PhD | Consultant |
| Melene Kabadege | World Relief/ Rwanda |
| Francois Niyitegeka | CSP Project Director |
| Chantal Bakuzako, | R & D Officer, World Relief/Burundi |
| Anne-Marie Barabwiriza | MOH Provincial Manager for Nutrition Programs |
| Euphrasie Kabura | MOH District Supervisor, HIS |
| Etienne Ndayizeye | MOH District Supervisor, Health Centers |
| Abraham Hakizimana | MOH District Supervisor, Health Programs |
| Deos Badyatuyago | TPS for Makebukko Health Center |
| Emile Niyungeko | CSP Training Officer |
| Gertrude Nyosaba | CSP Monitoring & Evaluation Officer |

Annex 8: Evaluation Assessment Methodology

Quantitative and qualitative data were obtained to evaluate this project at midterm and at end of project. The following locations were used for the final KPC survey: It was tested in the two of four sub-collines, Nyarugongo and Gahororo Nyabiziba, Nyambuye, Murambi and Gatumba, of Giheta Bukirasazi, Nyambuye, Kibuye and Tema collines, and Gitega Bukirasazi Commune in Gitega Province. It was implemented in Bukirasazi, Buraza, Itaba and Makebuko collines. Qualitative data was collected in Kibuye, Makebuko ward (Makebuko health center), Rukoki ward (Bukirasazi health center) and Buraza ward (Buraza health center).

As the baseline KPC-2000 survey had been translated into Kirundi, the same questions were used both times. Lot Quality Assurance Sampling method was used to randomly determine 24 respondents per commune for each indicator, for a total sample size of 96 households district-wide (See KPC report in Annex 6). A sampling interval in each supervision area was determined by using the following formula: Total number of population divided by 24. (Random number= three digits (first or last) in a way that the number should be smaller than the sampling.) Sampling interval in

a. Bukirasazi = Total survey population (35,084) = 1,462

$$\frac{\text{Total survey population (35,084)}}{\text{Total number of sub collines (24)}}$$

Random number: 385

b. Sampling interval in Buraza= Total survey population (47,066) = 1961

$$\frac{\text{Total survey population (47,066)}}{\text{Total number of sub collines (24)}}$$

Random number: 443

c. Sampling interval in Itaba = Total survey population (52,250) = 2177

$$\frac{\text{Total survey population (52,250)}}{\text{Total number of sub collines (24)}}$$

Random number: 999

d. Sampling interval in Makebuko = Total survey population (62,608) = 2609

$$\frac{\text{Total survey population (62,608)}}{\text{Total number of sub collines (24)}}$$

Qualitative data was obtained thru individual interviews (24), focus groups (16 groups) and in-home interviews (12 homes). The same questions selected at MTE were used for the final evaluation. One additional question concerning scaling up the project was added to the interviews with MOH staff (Annex 13: Project Data Form). The team determined that the sample size at certain levels would be complete while at other levels would be random. Complete samples included all MOH district personnel, all TPS, WR/Burundi staff involved in project implementation, all project supervisors and promoters. Focus group election was as follows: The

district ward or arrondissement of Itaba which had been selected for the midterm evaluation was excluded from the focus groups. Of the three remaining district wards, one was randomly selected. However, as it only had one health center, another was selected and two of its health centers randomly selected. For each health center, the head nurse or assistant head nurse as well as the COSA were interviewed. A CG group and group of elected elders or *chefs de colline* were randomly selected for each health center. In-homes interviews of mothers of children under five were selected based on whether she was at home. All interviews were conducted in such a manner as to provide privacy as well as confidentiality. Comments made during focus group discussions were not attributed to any particular member (Annex 10: List of persons contacted).

The FE team was divided into 3 smaller teams so that a member of MOH district or provincial staff was in each one as well as a member of WR district and central staff. After completing each interview set or focus group, data was transcribed by the consultant. The teams then analyzed the KPC data to identify what contributed to the results. The qualitative data was analyzed for common themes. Based on these two analyses, the team proposed recommendations. The KPC results were translated into French prior to presenting them during debriefing sessions. Key results and recommendations were then shared with the Provincial Medical Director, key MOH staff in Burundi, USAID and other NGOs also involved in child survival projects.

D. Data Quality and Use

Random selection is foundational to avoiding bias in collecting quantitative data. The quality of the KPC data at baseline and final assessment was ensured by first translating the questions into Kirundi, and, using the same ones at midterm and final evaluation. Questions were field-tested both times. Personnel involved in collecting the data received appropriate training. Data was entered using double data entry that allows the EPI INFO program to check for errors and to ensure quality control. The data were analyzed in EPI INFO program version 3.2.2; Excel.4 and Excel.5. Basic statistical analysis, primarily frequencies and ranges, were conducted to identify any inconsistencies, so that the data could be cleaned accordingly. An appropriate table was designed for each indicator. (Please see KPC report in Annex 6).

For qualitative data, the strategy used to avoid bias is to ensure that representatives of all stakeholders are included in the sample. The stakeholders for CSP were the provincial medical officer, MOH district staff, the medical director of the district hospital, health center personnel (head nurse and TPS), COSAs, *chefs de colline* and CG volunteers. Qualitative data was not collected at baseline, but at the mid-term evaluation. The interview and focus group questions used at the final assessment were the same ones as used during mid-term. Before data collection was begun, the questions were reviewed with all team members and potential differences in translation from French into Kirundi discussed. One team member transcribed the responses while the others led the discussions.

During the last two years of the project, significant attention was given to obtaining reliable data, and to discussing results with MOH district staff. For example, CSP data indicated that vaccination coverage was higher than district data. Project staff initiated the follow-up of lost cases. It was discovered that these children had been vaccinated, but, the data had not been registered at the health centers. Part of the issue was that during mass vaccination campaigns, not

all children were noted in registries. The data collected by CG was thus accurate. To date, however, there is no formal system for integrating C-HIS into MOH HIS.

One of the indicators used in the KPC survey is Vitamin A coverage. The current health card has a section for noting this information. However, Vitamin A is distributed twice a year during mass vaccination campaigns, and it is not recorded on the health card, rather, mothers receive a different small card stating their child has received Vitamin A. During the last campaign, staff had insufficient cards to distribute. Coverage cannot be determined through the health card and is based solely on recall.

Another area of difference between MOH-HIS and CSP-HIS is how quality is measured. For example, MOH only counts the number of new latrines for reporting purposes, while CSP also looks at the quality of the latrine (depth and maintenance). Another example is postnatal care of the newborn. The level of coverage is linked to the newborn care being given while the mother is still in the health center. DHS data for 2010 made the distinction between postpartum and postnatal care. For the East Central Region, postpartum care was 28.9% while postnatal at 2 days was 6.8 %. It was observed during the health center visits that personnel make no distinction between postpartum and postnatal care at 15 days and 45 days after birth. Personnel have also requested that postnatal care be the focus of future activities.

The following documents were consulted in preparation of this evaluation: CSHGP guidelines for final evaluation (May 2012); World Relief/Burundi DIP (July 2008); WR/Burundi annual reports (2009, 2010, 2011); Burundi DHS 2010; USAID/ Burundi Global Health Initiative 2011-2015 (September 2011).

Annex 9: List of Persons Interviewed and Contacted during the Final Project Evaluation

(* = attended debriefing meeting)

World Relief/Burundi

JJ Laska, Director of Programs *
Francois Niyitegeka, CSP Project Director*
Chantal Bakuzako, Research and Development Officer*
Allegría Inamuco, Communications Officer
Faustine Nyenyeri, Accountant
Caroline Bonilla, Technical Financial Supervisor from Nicaragua
Emmanuel Masumbuko, driver

World Relief/Kibuye

Emile Niyungeko, CSP Training Officer*
Gertrude Nyosaba, CSP M & E
Pelagie Nsabiyumva, CSP Book-keeper
Cyriac Ndaisaba, CSP driver
Supervisors: Ntakarumana, M., Ntakinumana, J.*, Manirambona, A.
Health Promoters:
Buraza Commune: Ngezahimana, A.*, Nshimirimana, F., Gahimbare, J. Z., Nyandwi, C.
Bukirasazi Commune: Shimirimana, A., Nimbona, D., Mataratara, S., Ikurkure, R.
Makebuko Commune: Ndayikunda, A., Butoyi, S., Nzirarusha, B., Irankunda, P., Karerwa, V.
Itaba Commune: Nimbona, T., Nzobonimpa, M.P., Bigiridavyi, A., Nitsumutima, B., Nkunuzuburundi, J., Nibona, A.J.

USAID/ Burundi

Jim Anderson, Country Director
Donatien Ntakarutimana, MD, Program Development Specialist, Health
Stanislas Ntahobani, MD, HIV Prevention *

Concern Worldwide/Burundi

Emanuela Burello, ACDP*
Reka Sztopa, Health Advisor*
Delphin Sula, Project Manager*

Catholic Relief Services/Burundi

Joseph Ilbouda, Coordinator*
Jeanne d'Arc Ntiranjibagira, MD*

MOH/Bujumbura

Ngirigi, Liboire, M.D., General Director for Health Services
Bazobanza, P. Claver, MD, PCIME/MSP *
Ryumeko, Evelyne, MD, Nutrition Unit/ MSP (Promianut)*
Mutoni, Annie, MD, MCH/MSP

MOH/Gitega

Toyi, Salvator, MD, Provincial Health Officer

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Barabwiriza, Anne- Marie, Provincial Manager for Nutrition Programs
Niyibaruta, Alfred, Represented Provincial Health Officer*

MOH/Kibuye District

Kaneza, Diane, MD, District Health Officer
Nkeshimana, Desire, MD, Medical Director at Free Methodist Hospital
Ndayizeye, Etienne, District Supervisor, Health Centers*
Hakizimana, Abraham, District Supervisor, Health Programs
Kabura, Euphrasie, District Supervisor, HIS
Nibigira, M.J., Assistant Head nurse @ Makebuko Health Center
Mdayizima, A., Manager @ Makebuko Health Center
Ndimurwango, F., Head nurse @ Bukirasazi Health Center
Halelimana, G., Head nurse @ Gisikara Health Center
Nindabiye, T., Head nurse @ Buraza health Center
Nahayo, Nestor, Nahayo TPS
Badyatuyago, Deos, Makebuko TPS
Iradukunda, Eric, Itaba TPS
Shamaje, Delphin, Buraza TPS

Focus Groups

Pastors' Care Group @ Makebuko: Habonimana, P. (Pentecostal); Nahimana, P., Habonimana, M., Nshimirimana, C., Kabura, S., Ntahomvukiye, D., Karenzo, L. (Catholic)

Pastors' Care Group @ Rukoki (Bukirasazi Health Center): Ntitariririza, G., Gakokara, M., Nyamwiza, J., Muhimba, C.P., Barnkenyeruye, I., Vyuname, J., Hbiyakare, E.

Pastors' Group @ Buraza: Sindabakuranye, S., Ndikuriyo, E., Bukuru, E., Kabura, F., Barankeba, Z., Nicizanye, C., Barekebavuge, D., Bigirindavyi, A., Ntahonkuriye, J., Kwizera, J., Nzigidahera, S., Niragira, A., Nizigiyimana, A., Ndikumana, A., Ndayikeza, S., Bucumi, M.

COSA @ Makebuko: Niyonzima, A (president and CG volunteer), Nahimana, M., Bankuwiha, M., Bunguruza, R., Ntahomvukiye, G., Nizigiyeyo, S., Ntacetampaye, C., Ntahomvukiye, C., Siboniy, R., Nahimana, J., Iborigomba, A.M., Bukuru, C., Nzibirabarya, E.

COSA @ Bukirasazi: Ngendahindavyi, V., Nduwayezu, J., Ndonderane, D., Ntiharirizwa, L., Hakizimana, N, Gohaha, Niyonkuru, Manrakiza, G., Ndikumana, P., Hagenimana, J., Sabokigina, Nzeyimana, Rl, Nzinahora, F., Ntahomvukiye, D.

COSA @ Buraza: Ndikumana, A., Bucumi, P., Nzinahora, R., Niyonzima, S., Budada, P., Nyandwi, J., Nshimirimana, G., Ntirampeba, C., Hakizimana, F., Nkongoro, A., Nimubona, T., Nyandwi, R., Kanyamuneza, E., Nyandwi, E., Bukeyenzeza, J., Niyonzima, J., Banyiyezako, O., Ngendabanyikwa, O., Mboninyibuka, F., Nicintije, E., Simbizi, A., Nshimirimana, J.M.

Volunteers/WR @ Muraro-Mavuvu (Makebuko Health Center): Nyandwi, B., Nshajeniruka, F., Havyarimana, C., Ncahorur, S., Nsemriyumva, C., Biyozima, G., Bangurambona, V., Nahimana, B., Mvuyekure, S., Niyibirira, L. (also one CHW and one chef de colline)

Volunteers WR @ Rukoki (Bukirasazi Health Center): Habonimana, F. (chef de colline), Bamkumiha, J., Bamdyatuyaga, I., Miyomsenga, Rl, Miyomzima, M., Ngemdabamyikwa, L., Simzoyiheba, C., Hatumgimana, E., Hatumgimana, JI, Niyomziman, S., Nzeyimana, M.,

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Micoyampaye, Al, Kwizera, J., Ndayishimiye, V., Nsabimana, S., Ntahimpera, J., Nsabimana, E., Gakobwa, M., Hbomimana, M., Ndagijiman, S. (CHW), Niyibigika, O. (CHW).

Volunteers WR @ Buraza

Administrator @ Bukirasazi Commune: Habonarugira, S.

Administrator @ Makebko Commune: Kiyongere, E.

Administrator @ Buraza Commune: Nibaruta, F.

Chefs de Colline (Bukirasazi Commune): Sindayhoriri, Nzigirabarya, S., Karabivyuye, J., Nvuyimbo, V., Nzeyimana, P., Budodwa, S., Ndikubwayo, G.

Chefs de Colline (Makebuko Commune): Nyandwi, C., Ntahomvukiye, P. C., Samusure, A., Ntahizaniye, Z., Gajuye, C.

Chefs de Colline (Buraza Commune): Ndikumana, A., Ntahonicaye, L., Bucumi, E., Kabaye, P., Hajayandi, H., Harasirika, T., Ndikuriyo, C.

Annex 10: Final OR Report

Not applicable

Annex 11: Special Reports

Supplemental Family Planning activities Program Statement

Flexible Fund Program Dates: March 1, 2012 -November 30, 2012

Budget Amount: \$79,582 WR Contacts:

Olga Wollinka, Maternal and Child Health Specialist; E: owollinka@wr.org; T 719-260-7062 (MST); skype: olga.wollinka; Address: 1370 Carlson Drive, Colorado Springs, CO 80919.

JJ Ivaska, Programs Director, World Relief Burundi (in Burundi); jivaska@wr.org; Phone: (443) 451-1900; Skype: jj.ivaska

Francois Niyitegeka, World Relief Burundi CSP Manager; email: FNiyitegeka@wr.org

Introduction and Background

Burundi is at a key time in its history for a new understanding and acceptance of Family Planning (FP). In December 2010, the President of Burundi, Pierre Nkurunziza, called for a meeting with key religious leaders to have a discussion titled Family Planning and Reproductive Health. In the “Gitega Declaration” that came from this meeting, religious leaders recognized Burundi’s demographic challenges and the economic and social consequences for coming generations if improvements to the demographics through Family Planning were not addressed.

The Gitega declaration states: *“We affirm our commitment to support and assist the Government's efforts in seeking lasting solutions in a comprehensive and effective manner, respectful of human and religious values, and at the same time encouraging the Government to engage in research and programs that are comprehensive and effective, while respectful of human and religious values (<http://pnsrburundi.org>).”*

World Relief is presently operating in Kibuye Health district through the USAID-funded Care Group Child Survival Program. This program is serving 198,516 people. This entire network can be leveraged to cost-effectively add FP activities, including promotion of FP in Care Groups and distributing FP commodities through community-based structures. Additionally, this program would be in accordance with the National Plan for Reproductive Health 2010-2014 (www.pnsrburundi.org).

The recent 2010 National KAP for Reproductive Health found that the modern contraceptive prevalence rate in Kibuye District is 8% (12.4% in Gitega); and there is a 53% unmet need for Family Planning.

FP commodities are assured. The German KreditAnstalt fur Wiederaufbau/Bank for Reconstruction (KfW) has provided FP commodities for the next two years, so World Relief is

confident that FP supplies are assured. Additionally, there are training manuals for all levels of MoH, but the funds to organize the trainings and print the manuals are not sufficient. In Kibuye, only one trained MoH staff person is available. And if he is not available at the health facility, then there is no FP service available within realistic reach of the local population.

There are visual aids available. However, these tools have not been distributed and consequently are not used.

Our project will revitalize community-based distribution (CBD) by offering key training for MoH Health Center staff, Community Health Workers (CHWs), and Care Groups. For Care Groups that do not have CHWs integrated into it, World Relief will train Care Group Leaders in CBD. In all, World Relief will train 170 CHWs and 100 CG Leaders for a total of 270 trained workers.

Program Staffing We propose that one of our current CSP Commune Supervisors take the role of FP Project Coordinator . This individual is a nurse and has worked in Health Centers for 20 years. FP activities were included in prior roles and job descriptions. (Her CV is attached.) World Relief needs to hire someone specifically in charge of FP, because the amount of work for this project is concentrated in such a relatively short period of time. Even though her activities will be integrated into the CSP activities, the additional workload justifies a new hire. We also need a dedicated staff person who understands FP, the MoH, and the current CSP project work through Care Groups in the community. Additionally, she lives in Gitega, knows the area, and has been working as a CSP Supervisor to date.

Project Goal, Objectives and Key Activities

Project Goal: To increase knowledge, access to and uptake of modern methods of Family Planning in Kibuye Health District.

Project Objective: To increase the % of mothers who are using a modern method of FP from 8% to 18%. KPC Contraceptive Prevalence Rate question can be added to our Final KPC this summer. (We would not have funds to do another KPC, but MOH data collection on contraceptive use will be available to us for reporting purposes.) This is not a key indicator, but it is our working objective.

Objective 1. Increase knowledge, demand, and uptake of modern methods of Family Planning among families living in Kibuye.

Objective 1 Activities:

An orientation and planning meeting at the beginning of the project. The two-day meeting will include World Relief and Ministry of Health staff from the target area.

Develop, field test and print FP curriculum for education of Care Group volunteers to use in sharing FP messages with all households in Kibuye. (We are adapting existing family

To hold community meetings about FP for information and to stimulate dialogue about FP.

WR Promoters to support to CHWs and CG Heads by evaluating their home visit counseling skills on supervision visits.

To organize monthly and quarterly meeting for discussion on FP data at HCS and health district

| | |
|---|--|
| <p>planning curriculum from other WR programs and approved MOH materials that are already in use in-country. We will submit all materials to Leah Elliott for review (LElliott@icfi.com).</p> <p>WR Promoters will train 2,722 Care Group volunteers about available FP methods and reasons for Healthy Spacing and Timing of Births.</p> <p>A Provincial Workshop for Religious and Community Leaders to discuss the importance of healthy timing and spacing of pregnancy and the range of family planning methods that can be used to meet that goal. This will be covered by WR funds.</p> | <p>level.</p> <p>A series of trainings for local (community level) religious and community leaders on the importance of healthy timing and spacing of pregnancies. Thirty (30) leaders from each of the 4 communes will participate in 3 one-day sessions. This line item will be covered by a different source of funds.</p> <p>The MoH has a mobile viewing unit (MVU) that will be dispatched to each of the four communes to show films promoting the importance of healthy spacing and timing of pregnancies.</p> |
|---|--|

Objective 2: Strengthen the capacity of Health Centers (HCs) to respond to the demand for FP services at the HCs.

Objective 3: Strengthen the system of community-based distribution (CBD), whereby CHWs distribute FP supplies within the communities.

Objectives 2 and 3 Activities (inter-related):

| | |
|---|--|
| <p>Train 50 MOH staff in 11 Health Centers, the MOH District, and the District Hospital with approved MOH FP curriculum (printed with Flex Fund grant) on how to provide quality family planning counseling and services at the health centers. WR Promoters and the Health Center staff will train a total of 270 Community Health Workers and Care Group Leaders on: the importance of healthy spacing and timing of pregnancies; the range of family planning methods; managing false rumors about family planning; and how to implement the community-based distribution of family planning commodities.</p> <p>All 170 CHWs in the district will be trained. The 100 Care Groups (of 209) who do not have a CHW assigned to them will have their leader attend.</p> <p>All 270 individuals will receive 3 one-day training sessions. These events will be spread out across the 4 communes of the health district.</p> | <p>Intentionally support male CHWs in visiting homes to talk about FP with men.</p> <p>Community mobilization during Mother and Child weeks held biannually in June and November.</p> <p>Support the Provincial Staff in charge of Reproductive Health to supervise CHWs and Care Group heads in the community.</p> <p>To organize monthly and quarterly meeting for discussion on FP data at Health Centers at the health district level</p> <p>Monitoring & evaluation activities related to FP.</p> <p>Printing of CHW training materials on CBD Training of CHWs and Care Group leaders on CBD</p> |
|---|--|

Objective #4.

To document how WR developed this model in partnership with the MOH, for integrating family planning into a Care Group program, and disseminate results widely.

Objective 4 Activities:

| | |
|---|--|
| <p>Focus group discussions amongst program staff,</p> | <p>Conduct a workshop with other WR Care Group</p> |
|---|--|

| | |
|---|---|
| <p>local stakeholders to identify lessons learned.</p> <p>Draft a case study describing this initiative and how family planning was integrated within the existing Care Group program. This case study will be shared with other Care Group programs.</p> | <p>programs to finalize a model for integrating family planning into Care Groups. Please note: this is the workshop described at the end of this document and would require additional funding from USAID/WL.</p> |
|---|---|

Program Monitoring and Key Indicators and Objectives.

Household and sub-colline level data is collected by the CHWs or, in absence of CHW, by the head of the Care Group in the sub-colline. Also, we want to train all CHWs and the CG Leaders because the CG Leaders will lead CGs in absence of the Promoter. The person responsible at the colline level will aggregate the data for the Health Center, under the supervision of the COSA President and the Health Promotion Technician who is responsible of all community health activities. (COSA stands for Comité de Santé. The Health Center Management Committee is comprised of CHWs, a primary school teacher or a pastor, and local leaders. HC staff are not included, except for the head of the HC.) The COSA President represents the HC. The CSP promoters and supervisors will help support community data collection. WR will incorporate questions related to FP in the already-scheduled KPC survey that will be conducted in July 2012 for the broader CSP. WR will also conduct a simple survey in November 2012 to evaluate the performance of the project in reaching its goal of increasing uptake of family planning methods in Kibuye.

| Objective | |
|--|--|
| Key Indicators and Targets | |
| <p>Increase knowledge, demand, and uptake of modern methods of Family Planning among families living in Kibuye.</p> | <p>Indicator:</p> <p>Number of FP Trainees by Type of Personnel and Topic of Training</p> <p>Targets:</p> <p>120 local religious and community leaders trained on the importance of healthy timing and spacing of pregnancies. (Thirty leaders from each of the 4 communes will participate in 3 one-day sessions. This line item will be covered by a different source of funds.)</p> <p>2,722 Care Group volunteers trained about available FP methods and reasons for Healthy Spacing and Timing of Births.</p> |
| <p>Objective 2: Strengthen the capacity of Health Centers (HCs) to respond to the demand for FP services at the</p> | <p>Indicator:</p> <p>Number of FP Trainees by Type of Personnel and Topic of Training</p> <p>Targets:</p> |

| | |
|--|---|
| <p>HCs.</p> <p>Objective 3: Strengthen the system of community-based distribution (CBD), whereby CHWs distribute FP supplies within the communities.</p> | <p>50 MOH staff in 11 Health Centers, the MOH District, and the District Hospital trained with approved MOH FP curriculum (printed with Flex Fund grant) on how to provide quality family planning counseling and services at the health centers.</p> <p>270 Community Health Workers and Care Group Leaders over all 4 communes will be trained (in 3 one-day training sessions) on: the importance of healthy spacing and timing of pregnancies; the range of family planning methods; managing false rumors about family planning; <u>and how to implement the community-based distribution of family planning commodities.</u> All 170 CHWs in the district will be trained. The 100 Care Groups (of 209) who do not have a CHW assigned to them will have their leader attend.</p> |
|--|---|

As the table below indicates, WR’s proposed activities will address the underlying obstacles to FP acceptance, as identified by the national reproductive health Knowledge, Attitudes, and Practices Survey.

| Main obstacles to FP acceptance identified by the RH National KAP ² . | WR Program solutions |
|--|--|
| The lack of involvement and / or the opposition of men to FP. | <p>Male CHWs supported to do home visits for FP education, also for teaching about FP to community groups (largely men).</p> <p>Teach male Religious Leaders about FP via Religious Care Groups</p> <p>Hold a provincial workshop for religious leaders to further the dialogue among groups that might oppose FP.</p> |
| The lack of dialogue on FP within couples | <p>Dispel rumors and share accurate information and FP methods, where to get them, how they work, and encourage family discussion about FP.</p> <p>This will be done by teaching the CG volunteers about FP, and when volunteers and CHWs do home visits.</p> <p>Workshop for Religious Leaders about how to help partners dialogue about FP in their marriage.</p> <p>Screen the Mobile Film in all 4 Communes to improve knowledge and attitudes towards FP.</p> |
| Religious denominations that oppose modern contraceptive methods contribute to lack of access for many people. | <p>Improve knowledge and understanding of FP by religious leaders through educating Religious Care Group members.</p> <p>Train and support Community Health Workers for community-based distribution of FP supplies.</p> |

² Study on knowledge, attitudes and practices (CAP) for family planning in Burundi. Final report, December 2010, National Program for Reproductive health, funded by KfW (German Development Bank) and UNFPA.

| | |
|--|---|
| The effect of certain religious teachings that are opposed to FP, in general, and the use of modern contraceptive methods in particular. | Host a Provincial Workshop for Religious Leaders around family planning and reproductive health issues facing Burundian families. |
| False rumors about FP and contraceptive methods abound. | Teaching CG volunteers, house-to-house teaching and dialogue about FP, teaching community leaders about FP. |

Proposal for Additional Funding from Flex Fund

WR has over 20 years of experience in designing, implementing and managing community-based health programs. WR has recognized expertise in community mobilization and behavior change, due to the successful Care Group methodology, first developed in a World Relief Mozambique CSP in 1995. WR has been awarded a total of 16 USAID Child Survival Health Grants Program (CSHGP) grants in Africa, Asia, Latin America, and the Caribbean. WR currently has USAID-funding in Burundi, Rwanda, and a TB grant in Mozambique; WR currently has health programs in Haiti, India, Indonesia, Kenya, Malawi and Sudan. Through Care Groups and other community-based efforts, these programs mobilize tens of thousands of volunteers to reach hundreds of thousands of mothers.

Using the available funds, WR will conduct a workshop in late 2012 or early 2013 that will bring together approximately 20 staff from these countries to explore how best to integrate family planning activities into WR’s current and future maternal and child health programming. Specifically, the workshop will be a strategic opportunity to:

- Share lessons from the recently completed USAID-funded family planning project in Burundi.
- Develop a set of principles and practices, with the advice of similar organizations (e.g. World Vision, CCIH), that will guide the integration of family planning activities into WR’s other maternal and child health projects. This set of guidelines will include how best to work with Community Health Workers and Care Group Volunteers in the area of family planning. It will also seek to include guidelines on how to engage with local religious and community leaders on this topic.
- Share curricula and other programming tools from all the projects related to family planning.

The estimated cost for this workshop – which would likely take place in Burundi or elsewhere in East Africa – is \$45,000.

Special Report: UNICEF funding for CCM in Kibuye

WR Burundi has been operating a USAID/WR-funded Child Survival Project (CSP) since October 1, 2007, that will run until September 30, 2012. The Ramba Kibondo “Live Long Child” project’s goal is to achieve significant and sustained reductions in mortality and morbidity among children under five years of age and women of reproductive age. This is a mature CSP, with over 2,736 volunteers in 209 Care Groups. These volunteers are bringing C-IMCI messages on malaria, diarrhea, malnutrition, and immunization to every beneficiary household in Kibuye (total population 198,516). The volunteers are also referring families in a timely manner to the nearest MOH center and rehabilitating moderately malnourished children in the community using the Positive Deviance Hearth (PD Hearth) approach. The success of the CSP provides a strong foundation for integrating Community Case Management (CCM) of malaria and diarrhea in Kibuye. The CCM activities will support the MoH system (health district, health centers and community) through the promotion of health technician/TPS. In terms of capacity building, World Relief will focus on the strengthening of health district supervisors and health centers staff for monitoring, as well as the strengthening of TPS for the implementation and follow up of CHWs.

Aligning with the National Health Plan

The proposed project will closely align with the National Health Plan (PNDS II). The proposed CCM program would strengthen, in particular, the third General Objective of the PNDS II: “Contribute to reducing the mortality of children under 5 years by 2015.” The sector goal target by 2015 is to “ensure the population’s access to care and quality health services” through nine strategic areas and divided into three groups. The table below lists these nine strategic areas and highlights the ones that would be addressed by the proposed project.

| Strategic Areas Under the PNDS II 3rd General Objective to Reduce Child Mortality | CCM’s Contribution |
|--|--------------------|
| I. Supply, create, and reinforce the demand <i>for care</i> | |
| a. Strengthening the provision of care and the quality of health services at all levels of the health system. | ✓ |
| II. Improve the capacity to provide care | |
| a. Strengthening the human resources available. | ✓ |
| b. Improving the production of qualified human resources. | ✓ |
| c. Improving the availability and accessibility of medicines and other quality health products for the population. | ✓ |
| d. Improving coverage in health infrastructure and equipment. | |
| e. Increasing funding of the health sector and improving its use. | |
| f. Strengthening and sustaining the performance based financing system. | |
| III. Improve the management of the sector | |
| a. Strengthening governance and leadership in the health sector. | |
| b. Strengthening the systems for health information, planning and M&E. | ✓ |

Since November 2010, WRB has been part of a small group working in coordination with the MOH around the HBMF implementation guidelines. On February 10, 2011, with the invitation of the National Malaria Control Program, WRB participated in small group discussions around

the use of HBMF tools validated by the same technical working group. According to the National Malaria Control Program's HBMF implementation schedule, the campaign to mobilize health personnel and communities at national, provincial, and district levels began in February 2011. WRB is an established partner of the MOH and has been asked to assist in the implementation of CCM (fever/malaria and diarrhea) in the Kibuye Health District. In order to do so, WRB needs financial support.

Lessons Learned

The framework for Household and Community IMCI (C-IMCI) was developed in 1997, building upon the earlier work of WHO and UNICEF on IMCI, and distills principles derived from decades of community health programming by NGOs and governments. The framework is composed of three elements³:

- Element 1: Improving partnerships between health facilities and the communities they serve.
- Element 2: Increasing appropriate and accessible health care and information from community-based providers.
- Element 3: Integrating promotion of key family practices critical for child health and nutrition.

The collaboration with the health centers in management of sick children must be reinforced, especially clinical-IMCI. At the community level, the CHW in charge of the promotion of the community key best practices must be the same person to implement CCM. Thus at that level, the integration of activities and tools is needed to avoid duplication or a scattering effect.

Proposed Collaboration

This project's strategy will be to build the capacity of the MOH to implement its CCM strategy in Kibuye Health District. The strategy is also guided by the three elements of the C-IMCI framework. The three outcomes described in the Results Framework below, correspond to the three elements of the C-IMCI framework. The Integrated CCM project will build upon the success of the mature CSP that WR has been operating in Kibuye since 2007. The CSP has addressed all three elements of the C-IMCI framework to varying degrees; the greatest progress has been in Element 3, thanks to the Care Group approach to distributing health messages. The proposed Integrating CCM project will continue the success WR has had with Element 3 and invest in strengthening the interventions targeting Elements 1 and 2 – that is, training CHWs to provide appropriate health care in the communities and strengthening the linkages between the communities, the CHWs, the Health Centers, and the MoH District.

Sustainability of Results

To ensure the **quality and sustainability of program implementation**, WRB will nurture and emphasize the MOH's ownership of the strategy and intervention. WRB will support the MoH in the organization of their staff (health district supervisors, district hospital, health centers staff, health promotion technicians) and the training of trainers (ToT) at the district level to then train the CHWs. WRB will also coach MoH staff at the central level, and supervise the CHWs as they are implementing CCM in their working areas in line with MOH guidelines. The supervision and training plans created under the direction of WRB at the time of training will be used to

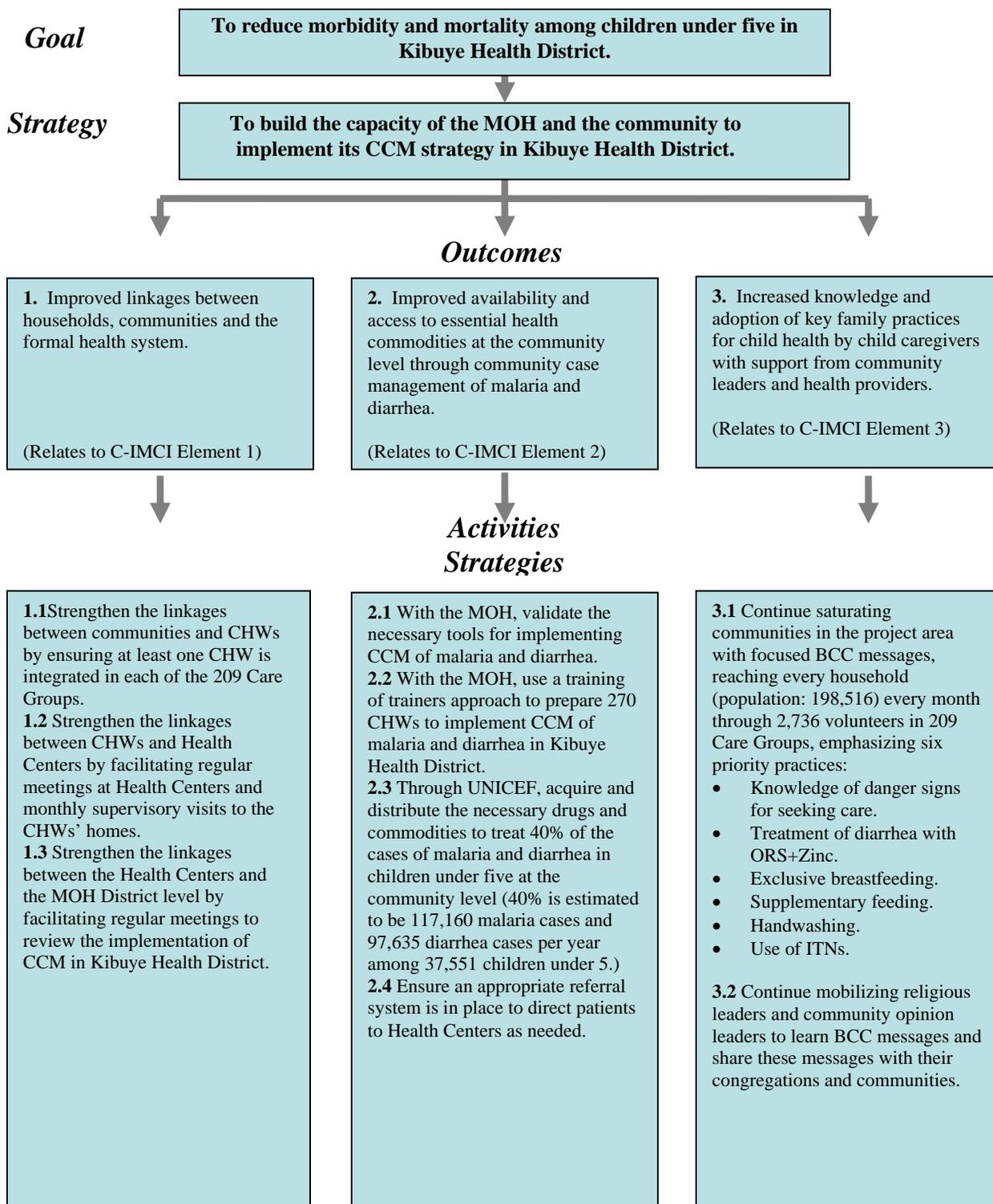
³ CORE Group, January 2009. Community-based Integrated Management of Childhood Illness Policy Guidance.

supervise individual CHWs at least monthly, to hold regular meetings with CHWs in their working areas, and to hold refresher trainings at least semi-annually. In addition, WRB staff will work with MOH personnel and CHWs to supervise the ongoing implementation of CCM. All activities will be included in the health province and district action plan for scale up of strategy. A bi-annual workshop will be organized to share experiences between the health districts (Muyinga, Kayanza and Cibitoke) who are implementing the strategy under the lead of MoH. The advocacy will be done to include CCM from the community to the Health district into the PBF indicators.

- The key to sustainable activities lies in community participation: the community will be included from the beginning to select their CHWs and to replace those who are not really working. It's very important that communities understand, own the project and hold their local leaders accountable.
- COSAs committee will serve as a link between the community and the health centers through the health technicians, Members will sensitize people to understand their role in the implementation and following up of the strategy,
- Advocacy will include important indicators from the PBF
- Drugs and commodities will be supplied through the CAMEBU and Sanitary District Bureau (BPS/BDS), with support from WRB, using the regular circuit.
- WRB will integrate the supervision of CCM activities at all level.

The Care Group network that WRB has established in Kibuye will also contribute to the intervention's sustainability. The current CSP is starting to introduce community savings initiatives amongst the Care Group volunteers as a sustainable approach for motivating and retaining the volunteers and CHWs who form the foundation for much of the program's efforts. WRB has also mobilized local religious and community leaders to receive the health messages and reinforce them in their own communication with their congregations and constituents. By mobilizing CHWs, Care Group volunteers, and local leaders, WRB's approach improves the odds of having a sustainable impact since all three sets of community-based actors can reinforce each other's messages.

Results Framework



Description of Project Activities

This project will continue many of the current CSP activities already ongoing in Kibuye Health District and supplement the national activities around the prevention and treatment of malaria and diarrhea using CCM. Community mobilization for this project and the promotion of six priority practices described above will be implemented using the existing network of volunteer Care Groups.

At the national level, WRB staff will partner with the MOH, under the guidance of a jointly developed MOU, to **develop a curriculum for CCM** to be used throughout Burundi. A five -day malaria and diarrhea training curriculum is now being developed by the MOH, and the piloting is ongoing with HBMF. This curriculum includes basic facts about malaria transmission and prevention, the screening and treatment algorithm, counseling skills for CHWs, and the use of malaria rapid diagnostic test record-keeping, reporting, and stock management. In addition to curriculum development, WRB staff will assist the MOH / National Malaria Control Program to develop training tools, other MoH program tools, and implementation guidelines. These documents and tools will be adapted from existing WHO basic tools and/or from existing tools in other countries.

Tools to be developed / validated

- CHW flowchart for RDTs
- CHW register for treated cases
- Referral registers
- Stock cards
- Algorithm for fever
- Algorithm for diarrhea
- Algorithm for orientation
- Individual flow for case management
- CHW booklets
- HC and District Hospital report forms
- Sick child recording form

| Role of WRB | Role of UNICEF | Role of MoH |
|---|--|---|
| To provide technical support in elaboration of different documents, materials, workshop and meetings on CCM | To provide financial and technical assistance on CCM | To participate and to lead all the workshop and meetings on CCM |
| To support on technical specifications of drugs and commodities | To assist on the technical specification of material and commodities | To validate the specifications |
| To support in the different trainings | To provide financial and technical support | To participate and to lead the trainings |
| To support in the supervision | To provide financial and technical support | To supervise the HCs and CHWs |
| Help the integration of activities | Monitoring | Integrated supervision at all level |
| To support on the integration in supply of drugs and commodities | Monitoring | Supply trough CAMEBU and BPS/BDS |
| Advocacy for the strategy | Advocacy | |

WRB will **train the 35 MOH personnel** at all levels of the district as trainers of trainers (TOTs). This training will consist of a five-day session specifically geared to enable them to train and

supervise the CHWs. Following the training of the TOTs (MOH personnel), TOTs will be coached by WRB to develop a specific training plan for the health centers they supervise. TOTs will then sensitize the local community about the coming CCM and will select new CHWs, in partnership with local leadership, who will then be trained by WRB.

The project will then train the 270 CHWs of the Kibuye Health District for a period of five days in the following topics: 1) Malaria transmission and prevention; 2) Diarrhea diseases in children and prevention 3) Using sick child record form; 4) Screening and treatment using algorithm; 5) Counseling skills; 6) Using the malaria rapid-diagnostic testing; 7) Record-keeping and reporting; 8) Anti malarial drugs administration to the sick child; 9) ORS and Zinc administration to the child with diarrhea; 10) Follow up of the sick child at community 11) Filling referrals form; 12) Stock management; and 13) Feeding practices for child illness. Each trained CHW will serve one sub-colline consisting of 100-150 households.

WRB will begin the training of the CHWs with three selected health center catchment areas, with approximately 30-35 CHWs attending the three-day training session in one week. The trainings will cover general information regarding diarrhea and malaria. The next week the same group will be trained on management of RDTs and using the algorithm to make decisions on whether to refer patients to the HC. After three months of implementation on what they learned (RDT and treatment) with close supervision, the CHWs will be ready to receive the three-day training on CCM of diarrhea with ORS+Zinc. WRB will draw on these three health centers that have completed the training and have begun implementing CCM as resources for teaching and learning to **rapidly scale-up training and implementation** throughout the entire district.

To ensure the **quality of training**, WRB will use quality assurance principles— ensuring that trained MOH personnel develop concrete skills to train, coach, and supervise the CHWs in their working areas. MOH personnel at the District and HC will set specific training plans in liaison with the MOH and the National Malaria Control Program. These plans will ensure that standards of training include training CHWs in small groups, certifying learnt skills upon completion of training, and composing training teams for each batch of trainees. Supervision and quality assurance of training will be overseen by the WRB project team with support of the Health District Supervisors.

After the five-day training session, CHWs will be equipped with the knowledge and materials to immediately implement CCM. They will have the drugs, tools, and training to treat uncomplicated cases of malaria and diarrhea. The drugs will be kept in a locked box at the home of each CHW, who will be held responsible for their management. No drug stocks will be allowed at the community level outside of the CHW's designated storage box.

Drug and commodity management will be done by the HCs. The requisition form will be used and the drugs will be provided according to the consumption record data from the stock card and the register of. The reconciliation between drugs distributed, cases treated, stock available and stock needs will be done by the HCs.

Annex 12: Project Data Form

Child Survival and Health Grants Program Project Summary

Dec-13-2012

World Relief Corporation (Burundi)

General Project Information

| | |
|---|--------------------------------|
| Cooperative Agreement Number: | GHN-A-00-07-00011 |
| WRC Headquarters Technical Backstop: | |
| WRC Headquarters Technical Backstop Backup: | Oiga Wollinka |
| Field Program Manager: | Francois Niyitegeka |
| Midterm Evaluator: | Paulette Chaponniere |
| Final Evaluator: | Paulette Chaponniere |
| Headquarter Financial Contact: | Rachel Hower |
| Project Dates: | 10/1/2007 - 9/30/2012 (FY2007) |
| Project Type: | Standard |
| USAID Mission Contact: | Dr. Donatien Nakarutimana |
| Project Web Site: | |

Field Program Manager

| | |
|-------------|---------------------|
| Name: | Francois Niyitegeka |
| Address: | Burundi |
| Phone: | |
| Fax: | |
| E-mail: | fniyitegeka@wr.org |
| Skype Name: | |

Alternate Field Contact

| | |
|-------------|--|
| Name: | Melene Kabadege (MCH Regional Technical Advisor) |
| Address: | Burundi |
| Phone: | |
| Fax: | |
| E-mail: | mkabadege@wr.org |
| Skype Name: | melene571 |

Grant Funding Information

| | |
|----------------------------|----------------------|
| USAID Funding: \$1,500,000 | PVO Match: \$520,609 |
|----------------------------|----------------------|

World Relief Burundi Child Survival Project Final Evaluation 2012

General Project Description

World Relief, a 2007 Standard category grantee, is implementing the *Burundi Child Survival Project* in Kibuye Health District in Gitega Province, Burundi. The program goals are: (1) To reduce morbidity and mortality among children under five and women of reproductive age; (2) To strengthen links from household to health system, empowering communities to act on local data to improve their health; (3) To build civil society in post-conflict Burundi, bring people together with a shared vision for the future of their children; and (4) To model sustainable community integrated management of childhood illness (C-IMCI) implementation strategies for national scale in Burundi.

Key strategies include: implementation of the Care Group Model and integration with the Ministry of Health (MOH) to introduce the C-IMCI in Burundi; modeling intensive community mobilization for C-IMCI roll-out and scale-up; piloting community case management (CCM) of malaria and diarrhea in Burundi; synergy with performance-based financing; and building civil society through mobilization for child health.

NEW PROGRAM ACTIVITIES: As of March, 2012, WRB was able to add an \$80,000 Flex Fund grant (via World Learning) for implementing community-based Health Timing and Spacing of Births in the last year of the CSP. This will leverage this network to cost-effectively achieve the goal of increasing knowledge of, access to, and uptake of modern methods of family planning. On the 'demand side,' the project will promote the importance of healthy timing and spacing of births and disseminate accurate information about a range of family planning methods through workshops for 120 religious and community leaders and the existing 209 Care Groups. On the 'supply side,' the project will train 50 MoH health center staff to provide quality family planning counseling and services to those individuals who come to the health centers. At the same time, the project will train 270 Community Health Workers and Care Group leaders to appropriately distribute family planning supplies in the communities. World Relief will also document and disseminate its experience integrating family planning activities into an existing Care Group-based Child Survival Project.

Additionally, UNICEF has pledged 2 more years of support after the present CSP ends to add Community Case Management of Malaria and Diarrhea- all drugs will be donated, and funds sufficient for training of MOH staff and community-based trainings via the already-established network of Care Group volunteers.

Project Location

| | |
|--------------------------------|-------------------------|
| Latitude: -3.67 | Longitude: 29.98 |
| Project Location Types: | Rural |
| Levels of Intervention: | Home Community |
| Province(s): | Gitega Province |
| District(s): | Kibuye Health District |
| Sub-District(s): | -- |

Operations Research Information

There is no Operations Research (OR) component for this Project.

Partners

| | |
|---|-----|
| Ministry of Health (Collaborating Partner) | \$0 |
| HealthNet TPO (Collaborating Partner) | \$0 |

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Strategies

| | |
|---|---|
| Social and Behavioral Change Strategies: | Community Mobilization Group interventions Interpersonal Communication |
| Health Systems Strengthening: | Task Shifting Developing/Helping to develop clinical protocols, procedures, case management guidelines Providing feedback on health worker performance Community role in supervision of CHWs Community role in recruitment of CHWs |
| Strategies for Enabling Environment: | Advocacy for revisions to national guidelines/protocols Stakeholder engagement and policy dialogue (local/state or national) Advocacy for policy change or resource mobilization Building capacity of communities/CBOs to advocate to leaders for health |
| Tools/Methodologies: | Community-based Monitoring of Vital Events LQAS |

Capacity Building

| | |
|------------------------|---|
| Local Partners: | National Ministry of Health (MOH) Dist. Health System Health Facility Staff Other CBOs Government sanctioned CHWs Faith-Based Organizations (FBOs) |
|------------------------|---|

Interventions & Components

| | | |
|---|------------------|-----------------------------|
| Immunizations (10%) | IMCI Integration | CHW Training HF Training |
| - Polio - Classic 6 Vaccines - Vitamin A - Surveillance - New Vaccines - Mobilization - Measles Campaigns - Community Registers | | |
| Nutrition (25%) | IMCI Integration | CHW Training HF Training |
| - ENA - Gardens - Complementary Feeding from 6 months - Hearth - Continuous BF up to 24 months - Growth Monitoring - Maternal Nutrition | | |

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| | | |
|---|------------------|-----------------------------|
| Vitamin A (5%) - Supplementation - Post Partum - Integrated with EPI - Gardens | IMCI Integration | CHW Training HF Training |
| Micronutrients | | CHW Training HF Training |
| Pneumonia Case Management - Case Management Counseling - Policy Advocacy for CCM of Antibiotics | IMCI Integration | CHW Training HF Training |
| Control of Diarrheal Diseases (20%) - Water/Sanitation - Hand Washing - ORS/Home Fluids - Feeding/Breastfeeding - Care Seeking - Case Management/Counseling - Zinc - Community Case Management with Zinc (Implementation) - Community Case Management with ORS (Implementation) | IMCI Integration | CHW Training HF Training |
| Malaria (30%) - Access to providers and drugs - ITN (Bednets) - Care Seeking, Recog., Compliance - Policy Advocacy for CCM of Malaria | IMCI Integration | CHW Training HF Training |
| Maternal & Newborn Care | IMCI Integration | CHW Training HF Training |
| Healthy Timing/Spacing of Pregnancy - Healthy Timing and Pregnancy Spacing Promotion | IMCI Integration | CHW Training HF Training |
| Breastfeeding (10%) - Promote Exclusive BF to 6 Months - Introduction or promotion of LAM - Peer support | IMCI Integration | CHW Training HF Training |
| HIV/AIDS | | CHW Training HF Training |
| Family Planning - Knowledge/Interest - Community-Based Distribution - Male Reproductive Health - Maternal/Neonatal Integration - Community Involvement - Access to Methods | IMCI Integration | CHW Training HF Training |
| Tuberculosis | IMCI Integration | CHW Training HF Training |
| Infant & Young Child Feeding - Gardens - Comp. Feed. from 6 mos. - Hearth - Cont. BF up to 24 mos. - Maternal Nutrition - Promote Excl. BF to 6 Months - Intro. or promotion of LAM | | |

Operational Plan Indicators

| Number of People Trained in Maternal/Newborn Health | | | |
|--|-------------|---------------|---------------|
| Gender | Year | Target | Actual |
| Female | 2010 | 2758 | |
| Female | 2010 | | 2774 |
| Male | 2010 | | 501 |
| Male | 2010 | 2 | |
| Female | 2011 | 2850 | |
| Female | 2011 | | 0 |
| Male | 2011 | | 0 |
| Male | 2011 | 550 | |
| Female | 2012 | 0 | |
| Female | 2012 | | 0 |
| Male | 2012 | | 0 |
| Male | 2012 | 0 | |
| Female | 2013 | 0 | |
| Male | 2013 | 0 | |
| Female | 2014 | 0 | |
| Male | 2014 | 0 | |

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| Number of People Trained in Child Health & Nutrition | | | |
|---|-------------|---------------|---------------|
| Gender | Year | Target | Actual |
| Female | 2010 | 2758 | |
| Female | 2010 | | 2774 |
| Male | 2010 | | 674 |
| Male | 2010 | 2 | |
| Female | 2011 | 2850 | |
| Female | 2011 | | 2925 |
| Male | 2011 | | 428 |
| Male | 2011 | 550 | |
| Female | 2012 | 2356 | |
| Female | 2012 | | 2356 |
| Male | 2012 | | 288 |
| Male | 2012 | 1571 | |
| Female | 2013 | 0 | |
| Male | 2013 | 0 | |
| Female | 2014 | 0 | |
| Male | 2014 | 0 | |

| Number of People Trained in Malaria Treatment or Prevention | | | |
|--|-------------|---------------|---------------|
| Gender | Year | Target | Actual |
| Female | 2010 | | 2768 |
| Female | 2010 | 2758 | |
| Male | 2010 | | 510 |
| Male | 2010 | 2 | |
| Female | 2011 | | 2945 |
| Female | 2011 | 2850 | |
| Male | 2011 | | 464 |
| Male | 2011 | 550 | |
| Female | 2012 | | 2356 |
| Female | 2012 | 2356 | |
| Male | 2012 | | 284 |
| Male | 2012 | 1571 | |
| Female | 2013 | 0 | |
| Male | 2013 | 0 | |
| Female | 2014 | 0 | |

World Relief Burundi Child Survival Project Final Evaluation 2012

| | | | |
|------|------|---|--|
| Male | 2014 | 0 | |
|------|------|---|--|

Locations & Sub-Areas

Total Population:

198,516

Target Beneficiaries

Burundi - WRC - FY2007

Children 0-59 months

37,551

Women 15-49 years

49,718

Beneficiaries Total

87,269

Rapid Catch Indicators: DIP Submission

| Sample Type: 30 Cluster | | | | |
|---|-----------|-------------|------------|---------------------|
| Indicator | Numerator | Denominator | Percentage | Confidence Interval |
| Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child | 157 | 300 | 52.3% | 9.9 |
| Percentage of children age 0-23 months whose births were attended by skilled personnel | 181 | 300 | 60.3% | 10.4 |
| Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth | 98 | 300 | 32.7% | 8.4 |
| Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours | 70 | 81 | 86.4% | 21.6 |
| Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall | 179 | 219 | 81.7% | 13.0 |
| Percentage of children age 12-23 months who received a measles vaccination | 121 | 136 | 89.0% | 16.7 |
| Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey | 129 | 136 | 94.9% | 16.8 |
| Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey | 100 | 136 | 73.5% | 16.2 |
| Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began | 19 | 111 | 17.1% | 10.4 |
| Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids | 31 | 71 | 43.7% | 19.2 |
| Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider | 54 | 102 | 52.9% | 17.1 |
| Percentage of households of children age 0-23 months that treat water effectively | 5 | 300 | 1.7% | 2.1 |
| Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing | 161 | 300 | 53.7% | 10.0 |
| Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night | 24 | 300 | 8.0% | 4.4 |
| Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population) | 49 | 299 | 16.4% | 6.2 |
| Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices | 56 | 219 | 25.6% | 8.8 |

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Rapid Catch Indicators: Mid-term

| Indicator | Numerator | Denominator | Sample Type: LQAS | |
|---|-----------|-------------|-------------------|---------------------|
| | | | Percentage | Confidence Interval |
| Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child | 83 | 96 | 86.5% | 6.8 |
| Percentage of children age 0-23 months whose births were attended by skilled personnel | 78 | 96 | 81.3% | 7.8 |
| Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth | 64 | 96 | 66.7% | 9.4 |
| Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours | 83 | 96 | 86.5% | 6.8 |
| Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall | 77 | 96 | 80.2% | 8.0 |
| Percentage of children age 12-23 months who received a measles vaccination | 87 | 96 | 90.6% | 5.8 |
| Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey | 92 | 96 | 95.8% | 4.0 |
| Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey | 87 | 96 | 90.6% | 5.8 |
| Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began | 47 | 96 | 49.0% | 10.0 |
| Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids | 75 | 96 | 78.1% | 8.3 |
| Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider | 79 | 96 | 82.3% | 7.6 |
| Percentage of households of children age 0-23 months that treat water effectively | 4 | 96 | 4.2% | 4.0 |
| Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing | 45 | 96 | 46.9% | 10.0 |
| Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night | 62 | 96 | 64.6% | 9.6 |
| Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population) | 35 | 96 | 36.5% | 9.6 |
| Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices | 0 | 0 | 8.0% | 6.0 |

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Rapid Catch Indicators: Final Evaluation

| Sample Type: LQAS | | | | |
|---|-----------|-------------|------------|---------------------|
| Indicator | Numerator | Denominator | Percentage | Confidence Interval |
| Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child | 93 | 96 | 96.9% | 3.5 |
| Percentage of children age 0-23 months whose births were attended by skilled personnel | 91 | 96 | 94.8% | 4.4 |
| Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth | 86 | 96 | 89.6% | 6.1 |
| Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours | 92 | 96 | 95.8% | 4.0 |
| Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall | 87 | 96 | 90.6% | 5.8 |
| Percentage of children age 12-23 months who received a measles vaccination | 93 | 96 | 96.9% | 3.5 |
| Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey | 93 | 96 | 96.9% | 3.5 |
| Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey | 92 | 96 | 95.8% | 4.0 |
| Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began | 91 | 96 | 94.8% | 4.4 |
| Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids | 86 | 96 | 89.6% | 6.1 |
| Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider | 94 | 96 | 97.9% | 2.9 |
| Percentage of households of children age 0-23 months that treat water effectively | 31 | 96 | 32.3% | 9.4 |
| Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing | 87 | 96 | 90.6% | 5.8 |
| Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night | 67 | 96 | 69.8% | 9.2 |
| Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population) | 4 | 96 | 4.2% | 4.0 |
| Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices | 89 | 96 | 92.7% | 5.2 |

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Rapid Catch Indicator Comments

Please Note: In Burundi the government considers women of reproductive age to be 15-45 not 15-49. Therefore, WRA figure in beneficiaries is for women 15-44 years old. Note: Rapid Catch #1: Child Spacing is not a 2007 Rapid Catch Indicator. Rapid Catch #15: The 2007 Rapid Catch Indicator for hand washing only asks about soap, not combined with hand washing practice. Numbers reported here are consistent with the 2007 Rapid Catch so only reflect possession of soap.

In 2012, WR received a Flex Fund grant for integrating FP into the CSP, therefore for the Final KPC we did collect modern FP use rate.

- 50% (48/96) are using FP method to avoid pregnancy
- 42.7% (41/96) are using modern methods

Annex 13: Grantee Plans to Address Final Evaluation Findings

World Relief Burundi and World Relief Home Office staff are grateful for the opportunity of an outside evaluation of the work of the CSP, and agree with the consultant's findings. Midterm evaluation suggestions were acted upon, and FE recommendations will be taken seriously as well. In addition, WR is already pursuing additional funding to build on the work established in Kibuye, the Unicef CCM grant and private donor funding for a start.

Annex 14: Quarterly Action Plan for COSA of Bukirasazi

COSA action plan to the health center of Bukirasazi

Period: January to March 2011

Principal Objective: to improve the health of the population in the catchment area of the health center Buikirasazi

| Objectives | Activities | Indicators | Calendar | | | Responsible parties |
|---|---|---|-----------------|-----------------|-----------------|--|
| | | | Jan | Feb | Mar | |
| Increase the number of women who seek family planning methods to CDS | - Home Visits - Community Meetings | Number of community Meetings, Number of women who seek methods; | 4 times a month | 4 times a month | 4 times a month | COSA, CSA, GST, basic administration COSA, ASC, TPS, administration de base |
| Increase the number of women giving birth at CDS (health centers) | Home Visits Community meetings targeting the importance of the birth at health centers | Number of community meetings Number of women giving birth at CDS | 4 times a month | 4 times a month | 4 times a month | COSA, ASC, TPS, voluntary administration and basic promoters |
| Increase the number of children who receive the vaccine against measles | - Home Visits - Community meetings targeting the importance of vaccination | Number of community meetings Number of children vaccinated against measles | 4 times a month | 4 times a month | 4 times a month | COSA, ASC, TPS, volunteers and promoters |
| Increase the number of pregnant women who come for ANC1 | - Home Visits Community meetings targeting the importance of early ANC | Number of community meetings Number of women attending ANC early | 4 times a month | 4 times a month | 4 times a month | COSA, ASC, TPS, voluntary administration and basic promoters |

Annex 15: Questions for Interviews and Focus Groups

Health Center

1. How has the project improved the health of your zone?
2. In what types of health center activities have the CSP promoters and volunteers participated?
3. How have you collaborated in this project's data collection and analysis?
4. Have you had stock-outs when you needed to treat a child for diarrhea (ORS packets) or malaria?
5. How much does a mother pay for an ORS packet?
6. When a mother comes with her child for immunizations and does not have her vaccination card, what do you do?

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7. How many births have you had at the health center since the beginning of the year?
Prenatal and postpartum visits?
8. What type of health education materials do you have for teaching about diarrhea, nutrition, immunizations and malaria?
9. What changes could you recommend for improving this project?
10. If there are no longer health promoters from the project, how do you plan on working with the care groups?
11. Health Committee (COSA) information.

Focus Groups with mothers at health center and during home visits

1. Do any of you know a Care Group volunteer? Have they come to visit you? How many times?
2. What new ideas have the Care Group volunteers taught you?
3. If you do not have an ORS packet in your home, what can you give to your child to drink?
4. Why do you think the Care Group volunteers come to visit you?
5. What else has this project added to the overall health of your family?
6. Have there been other positive changes you noticed because there are Care Groups? (ex., solidarity, cohesiveness)

Home Visits: Note – first ask the 5 questions from the focus groups with mothers. Then, observe for the following:

1. Check to see whether there is a hand washing station and whether it has soap (bar or powder).
2. Check the latrine for appropriate disposal of feces.
3. Ask to see the vaccination card or notebook to check vaccination status of children under five.
4. Check to see whether the mosquito bednet is properly installed.
5. Check the label of the bednet and record the information.

Health Committees (COSA) Asked them to describe their function

1. How has the project improved the health in your zone?
2. Do you have an action plan for improving the health in your zone?
3. What is the role of the project health promoters?
4. What is the role of the Care Group volunteers?
5. What changes could you recommend for improving this project?
6. If there are no longer health promoters from the project, how do you plan on working with the care groups?
7. Other results?

Care Groups and pastors' groups

1. The project has been organized so that Care Groups can meet regularly. What motivates you to attend these meetings?
2. What barriers do you face that cause you to not come to these meetings?
3. What suggestions do you have to remove these barriers?

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4. The project has given you health booklets. How have you used these booklets since your training? Do you have suggestions for improving them?
5. In what ways has the project impacted your and your family's health?
6. In what types of situations do you encourage mothers to go to the health center?
7. In addition to new health ideas, what other results have you seen because of the Care Groups? (ex., solidarity, cohesiveness)
8. What reasons do the women give when you make a home visit?
9. What difficulties have you had in carrying out your activities?
10. Other suggestions:

District Health Supervisors (MOH) and Medical Director (Hospital)

1. How has the project improved people's health in your district?
2. The project wants to increase outreach activities to help prevent diarrhea, malaria and malnutrition. It was planned that the Care Group volunteers could support these efforts by distributing zinc, water treatment powder, mosquito bednets, and, community-based malaria treatment. Do you anticipate that the MOH will give new directives for community-based activities?
3. For a limited time, Care Group volunteers had ORS packets available so that they could immediately begin rehydration. Given the new decentralized distribution system, what do you see as their role?
4. In what ways have you collaborated in the project's data collection and analysis?
5. What are this project's strengths?
6. What are this project's weaknesses?
7. What suggestions do you have for improving this project?
8. If there are no longer health promoters from the project, how do you plan on working with the care groups?
9. What suggestions do you have should funding be available to replicate this project in another district?

WR Supervisors and Public Health Technicians (TPS) from MOH (in separate groups)

1. The project has been organized so that Care Groups can meet regularly. What motivates the volunteers to attend these meetings?
2. What barriers prevent them from attending these meetings?
3. What suggestions do you have to remove these barriers?
4. In what ways have you collaborated in the project's data collection and analysis?
5. The project provided health booklets for the volunteers. How do you use these booklets during supervision? Do you have any suggestions for improving them?
6. In what ways has the project improved your community's health?
7. In addition to teaching new ideas about health, have you noted any other changes as a result of having Care Groups? (ex., solidarity, cohesiveness)
8. What are the strengths of this project?
9. What are the weaknesses of this project?
10. What suggestions would you make to improve this project?
11. If there are no longer health promoters from the project, how do you plan on working with the care groups? (for TPS only)

12. What suggestions do you have should funding be available to replicate this project in another district?

WR Promoters

1. The project has been organized so that Care Groups can meet regularly. What motivates the volunteers to attend these meetings?
2. What barriers prevent them from attending these meetings?
3. What suggestions do you have to remove these barriers?
4. Which volunteers are also CHWs?
5. The project provided health booklets for the volunteers. How do you use these booklets during training and supervision? Do you have any suggestions for improving them?
6. What teaching and communication techniques do you use during the volunteer training sessions? What communication techniques do the volunteers use for health education?
7. In addition to teaching new ideas about health, have you noted any other changes as a result of having Care Groups?(ex. solidarity and cohesiveness)
8. What are the strengths of this project?
9. What are the weaknesses of this project?
10. What suggestions would you make to improve this project?
11. What makes your work easy/difficult?
12. How would you describe your relationship with volunteers and with your supervisor?

Annex 16: KPC Report (see attached)



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FROM THE AMERICAN PEOPLE

Burundi Child Survival Project

Kibuye Health District *Gitega Province* **BURUNDI**

Knowledge, Practice and
Coverage (KPC) Survey Report
Final Evaluation

August 21, 2012

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ACRONYMS

| | |
|----------|---|
| ANC | Antenatal Care |
| ARI | Acute Respiratory Infection |
| AS-AQ | Artesunate and Amodiaquine |
| BCC | Behavior Change Communication |
| BCG | Bacillus Calmette-Guérin vaccine against Tuberculosis |
| CG | Care Group |
| C-HIS | Community Health Information System |
| CHW | Community Health Worker |
| C-IMCI | Community-IMCI |
| COSA | HC staff management committee (<i>Comité de Santé</i>) |
| CS | Child Survival |
| CSHGP | Child Survival & Health Grants Program |
| CSP | Child Survival Project |
| DPT | Diphtheria, Pertusis and Tetanus immunization |
| EBF | Exclusive Breastfeeding |
| EPI | Expanded Program on Immunization |
| FP | Family Planning |
| GAVI | Global Alliance for Vaccines and Immunizations |
| HC | Health Center |
| HIV/AIDS | Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome |
| HN-TPO | Health Net-Transcultural Psychosocial Organization |
| IMCI | Integrated Management of Childhood Illness |
| IMR | Infant Mortality Rate |
| IPT | Intermittent Preventive Treatment |
| ITN | Insecticide Treated Net |

| | |
|-------------|---|
| KHD | Kibuye Health District |
| KPC | Knowledge, Practices and Coverage Survey |
| LLITN | Long-Lasting Insecticide Treated Net |
| LQAS | Lot Quality Assurance Sampling |
| M & E | Monitoring and Evaluation |
| MCH | Maternal Child Health |
| MICS | Multiple Indicators Cluster Survey |
| MMR | Measles, Mumps, Rubella Immunization |
| MOH | Ministry of Health |
| NGO | Non-governmental Organization |
| ORS | Oral Rehydration Solution |
| ORT | Oral Rehydration Therapy |
| PBF | Performance-based Financing |
| PD/Hearth | Positive Deviance/Hearth |
| PDI | Positive Deviance Inquiry |
| PNDS | National Health Plan (Plan National de Développement Sanitaire) |
| POU | Point-of-use Water Treatment |
| PPH | Postpartum Hemorrhage |
| PVO | Private Voluntary Organization |
| Rapid CATCH | Core Assessment Tool on Child Health |
| STI | Sexually Transmitted Infection |

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Thanks and appreciation for the volunteer leaders of the care groups who have kindly guided and introduced the survey team to the community and households. In addition, thanks to the survey team for their diligence and precision in data collection.

Special thanks to the mothers of Kibuye Health District who willingly participated in the survey, and to countless others within the community of Kibuye who have supported the Rambakibondo Child Survival project.

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EXECUTIVE SUMMARY

The World Relief Burundi Child Survival Project (CSP) staff conducted a Final KPC (knowledge, practices and coverage) survey in July-August 2012 in Kibuye Health District, in the southeastern region of Gitega Province in central Burundi. The CSP area covered four communes: Bukirasazi, Buraza, Itaba, and Makebuko. The survey assessed the knowledge and practices of mothers of children 0-23 months in diarrheal disease control, malaria control, pneumonia, infant and young child feeding, maternal care, immunization coverage, and growth monitoring. The questionnaire used for the midterm and final KPC survey was adapted from KPC 2000+ and the Rapid Catch 2007. Lot Quality Assurance Sampling (LQAS) parallel sampling methodology was used to select survey respondents. Program beneficiaries total 87,269 and include 49,718 women of reproductive age (15-45) and 37,551 children under 5 years of age. The *Ramba Kibondo* CSP met or surpassed the following End-of-Project objectives:

- Increased ORS for children with diarrhea increased from 43% to 89%
- Increased fluids for children with diarrhea increased from 32% to 99%
- Children 0-23 months of age fed according to minimum appropriate feeding practices increased from 26% to 92%
- Immediate breastfeeding increased from 62% to 85%
- Household ownership of Long-lasting Insecticide-treated bednets increased from 3% to 73%
- use of LLINs by children 0-23 months increased from 8% to 70%
- use of LLINs by pregnant women increased from 33% to 80%
- Measles vaccine coverage increased from 55% to 82%
- DPT 3 coverage increased from 61% to 85%
- Suspected pneumonia cases treated rapidly increased from 53% to 98%
- Knowledge of 2 signs to seek care increased from 62% to 97%
- Children given anti-malarial medicine for fever within 24 hours increased from 17% to 95%
- Skilled attendants at birth increased from 52% to 95%
- Post-natal visit from an appropriate trained health worker within three days after birth increased from 33% to 89% Maternal hand-washing at appropriate times increased from 18% to 89%)
- Continued feeding during diarrhea episode increased from 63% to 99%
- % of children 0-23 years old who were underweight decreased from 16% to 4.2% (see discussion).
- Effectively treating water in households at point of use increased from 1% to 32%.
- Presence of soap at handwashing station increased from 53% to 90%
- Households with latrines increased from 9% to 79%

BACKGROUND

Burundi is a landlocked country in the [Great Lakes](#) region of [Eastern Africa](#) bordered by [Rwanda](#) to the north, [Tanzania](#) to the east and south, and the [Democratic Republic of the Congo](#) to the west. Its size is just under 28,000 km² with an estimated population of almost 8,700,000. Although the country is [landlocked](#), much of the southwestern border is adjacent to [Lake Tanganyika](#)¹. Burundi is one of the ten [poorest countries in the world](#). Due to Burundi's civil war, poverty has increased. Burundi is ranked 167 out of 177 countries in the 2008 Human Development Index².

Before the inauguration of this five year USAID funded project, data gathered from reliable sources in Burundi showed that Burundi's estimated infant mortality rate was 156 per 1,000 live births, with an under-five mortality rate of 231 per 1,000 live births. Malaria accounted for almost half of child deaths in health facilities nationwide, and malnutrition was the second leading cause of death with forty-one percent of rural children under five years of age underweight³.

Data from UNICEF 2008 report show a decrease of infant and under-five mortality rate. Burundi's estimated infant mortality rate is 102 per 1,000 live births, with an under-five mortality rate of 168 per 1,000 live births⁴.

The CSP success is part of a national trend: in May of 2012, the DHS published results of the most recent DHS (2010.) There have been significant improvements in infant and child mortality rates: "Between 1996- 2001 (10-14 years before the survey) infant mortality was 115 per thousand live births, which dropped to 59/1,000 from 2006-2011. Child mortality dropped from 204/1,000 to 96/1,000 over the same period. Rates of child mortality (under ten years of age) vary according to place of residence (79/1,000 in urban areas against 131/1,000 in the middle rural) and maternal education (141/1,000 when the mother has no education and 47/1,000 when the mother has reached a level of education secondary or higher) (Enquête Démographique et de Santé Burundi 2010., 2012)."

¹ www.uneca.org/aisi/nici/country_profiles/burundi/burab.htm

² http://www.unicef.org/infobycountry/burundi_statistics.html

³ Republique du Burundi/Ministere de la Santé Publique. *Plan National de Developpement Sanitaire, 2006-2010*. Bujumbura, November 2005 [hereafter: **PNDS 2005**]

⁴ UNICEF/Institut de Statistiques et d'Etudes Economiques du Burundi (ISTEEBU). Enquête Nationale d'Evaluation des Conditions de vie de l'Enfant et de la Femme au Burundi (ENECEF-BURUNDI 2000)/Multi-Indicator Cluster Survey, Rapport Final. Burundi 2000. [hereafter: **MICS 2000**]

Program Location

The Burundi CSP is based in southeastern Gitega Province in central Burundi. Gitega has an estimated population of 847,400 in 11 communes⁵. The project area includes the 274 subcollines included into 85 collines, organized into four communes, which constitute the Kibuye Health District: Makebuko, Itaba, Bukirasazi and Buraza communes. The district's entire population is estimated to be 198,516⁶.

Beneficiary Population

The project beneficiaries are women of reproductive age (defined as women 15-45 years of age in Burundi) and children under the age of five. Based on population data from the Commune Administrative heads, Program beneficiaries total 87,269 and include: 49,718 women of reproductive age (ages 15-45) and 37,551 children under five.

| | | | | |
|--------------------------------------|--------|--------|--------|--------|
| 6-11 months | | | 1.85% | 3881 |
| 12-23 months | 3.94% | 6,688 | | |
| 24-59 months | 6.48% | 11,000 | | |
| 12-59 months | | | 14.20% | 29789 |
| 0-59 months | 14.36% | 24,376 | 17.90% | 37551 |
| woman reproductive age (15-49 years) | 22.49% | 38,176 | 23.70% | 49718 |
| pregnant women expected | | | 5.00% | 10489 |
| Male | | | 49.20% | 103212 |

⁵ U.S. Census Bureau International Database

⁶ Kibuye Health District, Annual Report 2009

| | | | | |
|---------------------|--|--------|--------|--------|
| Female | | | 50.80% | 106568 |
| Total beneficiaries | | 62,552 | | 87,269 |

Project Goals and Strategic Objectives

The project's goal was to reduce the morbidity and mortality among children under five (U5) and women of reproductive age (WRA) through the implementation of Community-Integrated Management of Childhood Illness (C-IMCI) using the Care Group Model in KHD. The project had three major objectives: 1) Improved linkages between households, communities and the formal health system; 2) Improved availability and access to essential health commodities at the community level; 3) Increased knowledge and adoption of key family practices for child health by child caregivers with support from community leaders and health providers.

Rapid Catch Indicators: Final Evaluation

| Sample Type: LQAS Parallel Sampling | | | | |
|--|------------|--------------|------------|---------------------|
| Indicator | Numer-ator | Denomin-ator | Percentage | Confidence Interval |
| Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child | 93 | 96 | 96.9% | 93.43 – 100.00% |
| Percentage of children age 0-23 months whose births were attended by skilled personnel | 91 | 96 | 94.8% | 90.36 – 99.24% |
| Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth | 86 | 96 | 89.6% | 83.49 – 95.71% |
| Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours | 92 | 96 | 95.8% | 91.79 – 99.81% |
| Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified | 87 | 96 | 90.6% | 84.76 – 96.44% |

| | | | | |
|---|----|----|-------|-----------------|
| or mother's recall | | | | |
| Percentage of children age 12-23 months who received a measles vaccination | 93 | 96 | 96.9% | 93.43 – 100.00% |
| Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey | 93 | 96 | 96.9% | 93.43 – 100.00% |
| Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey | 92 | 96 | 95.8% | 91.79 – 99.81% |
| Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began | 91 | 96 | 94.8% | 90.36 – 99.24% |
| Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids | 86 | 96 | 89.6% | 83.49 – 95.71% |
| Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider | 94 | 96 | 97.9% | 95.03 – 100.00% |
| Percentage of households of children age 0-23 months that treat water effectively | 31 | 96 | 32.3% | 22.95 – 41.65% |
| Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing | 87 | 96 | 90.6% | 84.76 – 96.44% |
| Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous | 67 | 96 | 69.8% | 60.62 – 78.98 |

| | | | | |
|--|----|----|-------|----------------|
| night | | | | |
| Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population) | 4 | 96 | 4.2% | 0.19 – 8.21% |
| Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices | 89 | 96 | 92.7% | 87.50 – 97.90% |

National Standards and Policies

Health Services

There are 11 health centers (HCs) in Kibuye Health District (KHD): ten HCs are MOH-affiliated and managed, while one HC is a private, mission-run facility operated separately by the Catholic Church. Health Centers provide preventive and curative services, with varying capacity.

Preventive services typically include immunization, antenatal care, family planning, and growth monitoring. Less commonly available preventive services include postnatal care, vaccination of women of reproductive age (with tetanus toxoid), as well as VCT for HIV and STI screening.

Kibuye Hospital, run by the Free Methodist Church of Burundi, is the referral center for all 10 HCs in KHD. Health Net-TPO is supporting the province in implementation of performance-based financing for health indicators; this helps motivate staff by increasing salaries of health personnel when they meet targets. The hospital has an operating theater for surgical procedures, delivery care, inpatient beds, a TB isolation ward, lab tests, and (when reagent is in stock) VCT for HIV. In addition to the recent government roll-out of C-IMCI, the MOH also plans to expand enrollment and access to services provided by community health insurance scheme. Due to high deaths in vulnerable groups (children under five and maternal) the President of Burundi has made care for children under five and childbirths free of charge. This initiative has contributed to increased use of health services⁷.

Immunizations: The standard immunization regimen for infants in Burundi includes the GAVI-supported pentavalent vaccine, as well as BCG, polio pentavalent, and measles. Health centers that report monthly statistics on health services provided for free to children U5 and pregnant women are reimbursed in the form of drugs rather than payments. Some health centers conduct EPI outreach, while smaller centers offer immunizations only at facilities. Bi-annual Maternal and Child Health (MCH) Weeks provide Vitamin A and maternal iron supplementation, de-

⁷ Kibuye Health District, Annual Report 2009

worming drug, and opportunities to recover immunization defaulters. Immunization defaulters are identified when a sick child is brought to the health center for consultation or when staff check the child's health card and provide catch-up vaccines as needed.

Antenatal Care: Antenatal and delivery care are provided free of charge. If the HC cannot handle the delivery, they refer the patient to Kibuye or Gitega hospitals. The Kibuye district hospital have been strengthened to support the referral complicated deliveries and other emergencies by gynecologist medical specialist.

Malaria: The MOH set a goal to reduce malaria incidence by 25% by 2010, with long-lasting insecticidal nets (LLINs) as the primary prevention strategy. Drug case management is also high on the government of Burundi's list of priorities. The current recommended treatment regimen is Artesunate and Amodiaquine (AS-AQ). ITNs which are not LLINs have been prohibited in Burundi since 2008. LLIN distribution has three channels: firstly through mass campaign distribution, secondly in the health centers during the first trimester of antenatal care and thirdly when the child receives a measles vaccine.

OBJECTIVES OF THE FINAL KPC SURVEY

This survey was conducted from July 4-13, 2012 as part of the final evaluation for the "Ramba Kibondo" Child Survival Project (CSP) sponsored by USAID/World Relief.

The purpose of the survey is to measure achievement of project goals by comparing results from the baseline (2007), midterm (2010) and final KPCs. Additionally, the CSP results are also compared to national reference data from the recently-completed DHS in 2010 (the report in French was just published in May of 2012). Survey data reports knowledge, practice and coverage (KPC) within KHD related to the following standard indicators: a) Mothers educational background, b) Maternal and Newborn Care, c) breast feeding and child nutrition, d) Control of diarrhea, e) growth monitoring, f) child immunizations, g) malaria case management, and h) Pneumonia treatment.

PROCESS AND PARTNERSHIP BUILDING

To ensure the participation of many actors in the data collection, the efforts were made to include all administrative and Health staff from District level in the planning and the implementation of KPC Survey. World Relief CSP staff and the MCH Regional Technical Advisor were also involved. The District Health Office also provided staff to participate in interviewer training; they were very active and contributed a great deal in updating the questionnaires and organizing data collection. They also equipped surveyors with equipment and materials such as scales and drugs for demonstration during the survey and they were fully involved in data collection.

Health center staff, TPS, CSP supervisors, and promoters participated in data collection during the four days of the survey, and also participated in the surveyor training preceding the data collection. As the survey was conducted through the community, local leaders and program

volunteers also assisted surveyors. Without the involvement of the local leaders and health center staff, it would not have been easy to identify the delimitation of each sub-colline (the small geographical unit for data collection that was used for Lot Quality Assessment, rather than the typical 30 cluster methodology).

METHODS

The KPC questionnaires are based on the KPC 2007 modules⁸ and LQAS protocol for Parallel Sampling including Rapid CATCH 2007 indicators⁹ as well as project indicators. In the case of the Rapid CATCH 2007, seven questionnaires were needed. A separate questionnaire for each sample was developed. Each questionnaire has room to record interviewer and respondent identification information, socio-demographic information and consent information. In each community, the interview team had one complete set of the seven different questionnaires to complete in parallel. The questionnaires were formatted to facilitate both data collection and ease of data entry, with separate columns for question numbers, questions, response options, skip patterns and answers.

The Final KPC questionnaire is consistent with the Baseline survey questions except that four more questions were added. One is related to when ITN was obtained, to identify LLINs that were distributed in the 5 last years (previously, nets sold might not have been LLINs). Two other questions are related to Family Planning that was added to MCH interventions this year. Another question was regarding Nutritional Status, to facilitate the analysis and estimate of underweight children. Please see Annex A of this document for the 7 Questionnaires in English. The content of each questionnaire is as following:

Questionnaire 1 has 33 questions for mothers of children 0-23 months. Those questions were relevant to all mothers with children under the age of five. This survey included sections for Maternal and Newborn Care; Illness recognition; Water and sanitation, Malaria prevention, reproductive health with Anthropometrics.

Questionnaire 2 had 6 questions for mothers of children 0-5 months, and includes a section for breastfeeding.

Questionnaire 3 had 10 questions for mothers of children 6-23 months, and includes sections for Nutrition and Vitamin A supplementation.

⁸ KPC2000 SURVEY FOR PVO CHILD SURVIVAL REVISED BY CHILD SURVIVAL TECHNICAL SUPPORT PROJECT (CSTS) AND CORE M&E WORKING GROUP

⁹ CORE Group, September 2008. Protocol for Parallel Sampling: Using Lot Quality Assurance Sampling to Collect Rapid CATCH Information.

Questionnaire 4 had 13 questions for mothers of children 12-23 months, and includes sections for Immunization.

Questionnaire 5 had 8 questions for mothers of children 0-23 months experiencing fever/malaria in the last two weeks, and includes a section for Fever/ malaria treatment.

Questionnaire 6 had 7 questions for mothers of children 0-23 months experiencing diarrhea in the last two weeks, and includes a section for Control of Diarrhea.

Questionnaire 7 had 6 questions for mothers of children 0-23 months experiencing pneumonia in the last two weeks, and includes section for Pneumonia treatment.

The questionnaires were developed by CSP team led by MCH Regional Technical Advisor and reviewed by WR MCH Specialist Rachel Hower. The questionnaires were translated into Kirundi by CSP M&E officer in collaboration with CSP Training Officer. The seven questionnaires were reviewed also during the interviewer training conducted at Kibuye in July 2012. It was also tested in the four sub collines in Kibuye that were not selected for the KPC, Nyabiziba, Nyambuye, Murambi and Gatumba, of Bukirasazi, Nyambuye, Kibuye and Tema collines, and Bukirasazi Commune in Gitega Province. After the field test, the questionnaires were finalized and printed.

Table 1: Sample Groups & Rapid CATCH Indicators

| Sample Groups | Rapid CATCH Indicators |
|----------------------|---|
| Children 0-23 months | Maternal and Newborn Care |
| | Percentage of mothers with children 0-23 months who received at least two Tetanus Toxoid doses before the birth of the youngest child |
| | Percentage of children 0-23 months whose births were attended by skilled personnel |
| | Percentage of children 0-23 months who received a postnatal visit from an appropriately trained health worker within 3 days after birth |
| | Malaria |
| | Percentage of children 0-23 months who slept under an insecticide-treated bed net (ITN) the previous night |
| | Water and Sanitation |
| | Percentage of households with children age 0-23 months that treat water |

| | |
|--|---|
| | effectively |
| | Percentage of mothers of children age 0-23 months who live in a household with soap at the place for hand washing |
| | Anthropometrics |
| | Percentage of children age 0-23 months who are underweight (-2SD for the median weight for age according to SHO/NCHS reference population. |
| Children 6-23 months | Infant and Young Child Feeding-modified in this survey |
| | Percentage of children age 6-23 months fed a minimum number of food groups |
| | Vitamin A supplementation |
| | Percentage of children age 6-23 months who received a dose of vitamin A in the last 6 months; card verified or mother's recall |
| Children 12-23 months | Immunization |
| | Percentage of children aged 12-23 months who received measles vaccine according to the vaccination card or mother's recall by the time of the survey |
| | Percentage of children aged 12-23 months who received DPT1 according to the vaccination card or mother's recall by the time of the survey |
| | Percentage of children aged 12-23 months who received DPT3 according to the vaccination card or mother's recall by the time of the survey |
| Children 0-5 months | Breastfeeding |
| | Percentage of children 0-5 months who were exclusively given breast milk the day prior to the interview |
| Children with fever during the previous 2 weeks | Malaria |
| | Percentage of children age 0-23 months with a febrile episode during the last 2 weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began |
| Children with diarrhea during the previous 2 weeks | Percentage of children age 0-23 months with diarrhea in the last 2 weeks who received oral rehydration solution (ORS) and/or recommended home fluids |

| | |
|--|---|
| Children with cough or difficult breathing during the previous 2 weeks | Acute Respiratory Infections |
| | Percentage of children age 0-23 months with chest relate-cough and fast and/or difficult breathing in the last 2 weeks who were taken to an appropriate health provider |

SAMPLING DESIGN

Lot Quality Assurance Sampling (LQAS) with parallel sampling methodology was used. For LQAS one typically would randomly select a minimum sample of 19 from each supervision area, with a total sample of 95 for each indicator; this provides an acceptable level of error for making management decisions at the level of the supervision area as well as aggregated results for the entire project area with reasonable confidence intervals. As there are four supervision areas within Kibuye CSP, the survey team sampled 24 small communities, or subcollines, in the project area. Therefore, for this survey, the sample size is 96 at program level and 24 in each of the four supervision areas. Please see the Annexes for the Kibuye Health District Sampling Frame used for this Survey.

COMMUNITY SELECTION

The selection of 96 sub-collines followed the procedure described in the Participants Workbook and Manual of Assessing Community Health Programs Using LQAS for Baseline and Regular Monitoring, pages 33-40.

A sampling interval in each supervision area was determined by using the following formula: Total number of population divided by 24. (Random number= three digits (first or last) in a way that the number should be smaller than the sampling.) Sampling interval in

a. Bukirasazi = Total survey population (35,084) = 1,462

Total number of sub collines (24)

Random number: 385

b. Sampling interval in Buraza= $\frac{\text{Total survey population (47,066)}}{\text{Total number of sub collines (24)}} = 1961$

Total number of sub collines (24)

Random number: 443

c. Sampling interval in Itaba = $\frac{\text{Total survey population (52,250)}}{\text{Total number of sub collines (24)}} = 2177$

Total number of sub collines (24)

Random number: 999

- d. Sampling interval in Makebuko = $\frac{\text{Total survey population } 62,608}{\text{Total number of sub collines } (24)} = 2609$

Random number: 407

The starting sub-colline was selected using random number table. The next sub-colline was selected by taking the sum of the random number and the sampling interval. Identification of the remaining sub-collines was calculated by adding the sampling interval to the population number of the previous sub colline.

Household Selection

The starting point for each sub-colline was determined in the following manner: the survey team asked village leaders to identify the center of the village. From that central point, a random direction was selected by spinning a bottle. Surveyors then walked in a straight line in the randomly chosen direction until they reached a house with a child under 24 months, which became the first mother to address question 1 for mothers of children 0-23 months. At the first house the surveyor asked also questions on the questionnaire pertaining to one of the other sample groups based on the age of that child. After that the interviewer asked if the child had fever, diarrhea or cough with fast and/or difficult breathing in the last 2 weeks. If the child was ill with any of these illnesses, the interviewer filled out the appropriate illness questionnaire. After finishing all relevant questionnaires to the first household, the interviewer identified the questionnaires that still need to be completed and proceeded to the household with the nearest door of the first house and asked if there was a child that met criteria for any remaining questionnaires. He continued this process until all questionnaires were completed.

Interviewer and Supervisor Trainings

The 23 interviewers were recruited from CSP Staff and Kibuye Health District staff. They included 4 TPS, 2 HC staff sent from the Health District, 14 (out of 24) promoters and 2 out of the 4 CSP supervisors. The remaining CSP staff who did not participate in the survey were either on leave or doing data entry.

The 4 KPC Survey Supervisors included the Program Manager; the M&E Officer, the Training officer and one CSP supervisor; they were trained for two days. The facilitator was the MCH Regional Technical Advisor, Melene Kabadage, who has led many KPC surveys in Rwanda and Burundi. The main topics for supervisor refresher training included: a review of the questionnaires for seven sample groups; a review of random methodology and how to select a sub-colline by using sampling interval in order to get a sample of 24 sub-collines to be included in the survey per Commune; a discussion on the methodology for household and respondent selection; a discussion on the data collection process; the schedule, topics, training sessions and

appropriate methodologies for interviewer training; and a discussion on supervision methodology such as follow-up data collection, coding and providing support to interviewers.

The interviewer refresher training was conducted on July 5, 2012. The workshop reviewed the following points: KPC survey Objectives and principles, LQAS parallel sampling methodology, basic techniques of interview, how to select the first household; and review and practice interview for each questionnaire. The refresher training started with a pre-test and ended with a post-test and an evaluation of all the sessions.

The pre-testing of the questionnaires took place in collines of Bukirasazi, Nyambuye, Kibuye and Tema of Bukirasazi a commune located outside the survey zone. This provided the interviewers with an additional opportunity to practice conducting the survey and coding responses on the survey form. It also gave supervisors practice in using the supervisor form, to take note of potential problems that may be encountered in the field, and to strategize ways to overcome the identified challenges. In half days after the pre-test, the team reviewed the revised questionnaire form and discussed problems that were observed in field or in the coding of the questionnaires. One day before starting the survey the supervisors adapted the questionnaires accordingly and prepared all materiel needed for survey such as balances, samples of anti-malarial drugs, deworming drugs, and printed questionnaires.

Data Collection and Analysis

Data collection took four days in the program area including four communes. The interviewers required approximately around 25-40 minutes per household to complete 2-3 questionnaires per household and 60-90 minutes to complete all of the 7 questionnaires in each subcolline. Most of the time was spent looking for the appropriate household with children of the required ages, as it was farming season and many mothers were busy on field and working out of their home. In each commune 24 sub collines were targeted and 96 questionnaires were completed in all project area for each sample group.

We trained four survey supervisors, and all followed up on data collection in the field. On each survey day, the four supervisors reviewed each of the completed questionnaires before leaving the village in which data had been collected in order to ensure the completeness and accuracy of the survey forms. In the event of missing data, interviewers returned to the household to gather the necessary information.

The data entry team consists of the 6 people including one non CSP Staff, 5 WR CSP staff such as Training Officer, 3 promoters and 1 CSP supervisor oriented by MCH Regional Technical Advisor. The methodology used was double data entry that allows EPI INFO program to check for errors and to ensure quality control. The data were analyzed in SPSS program, EPIINFO program version 3.2.2; Excel.4 and Excel.5. Basic statistical analysis, primarily

frequencies and ranges, were conducted to identify any inconsistencies, so that the data could be cleaned accordingly and then we designed appropriate table for each indicator.

RESULTS

Characteristics of the sample groups surveyed

The following tables, compiled from parallel sampling survey data, provide an overview of the distribution of children by age or by sex for four out the seven sample groups.

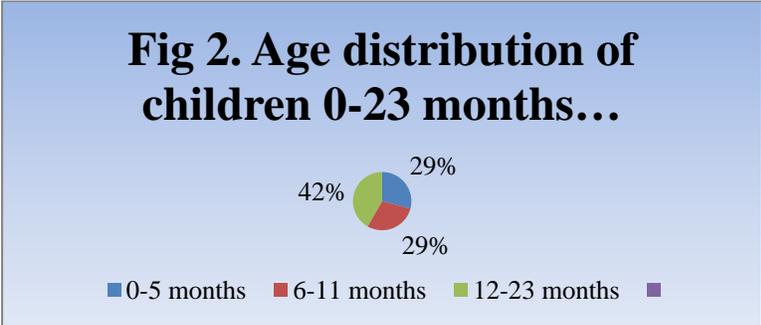
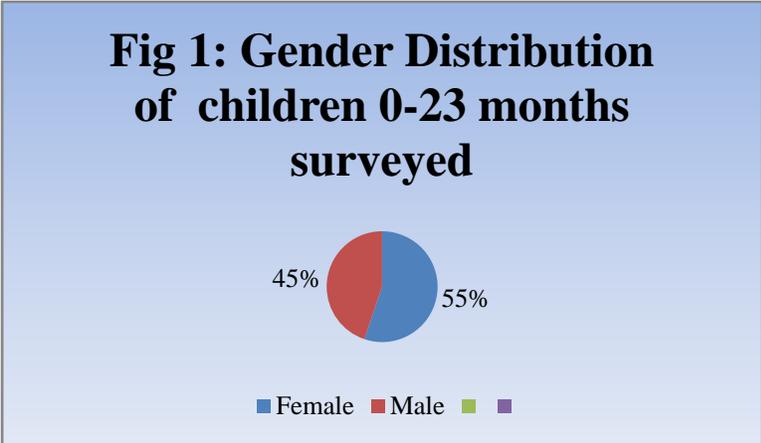


TABLE 2: FINAL KPC INDICATORS Table comparing KPC Surveys at baseline, midterm and final with final targets, recent CSP Monitoring data and the 2010 DHS, for a national reference point)

| M&E Matrix—Final Evaluation | | | | | | | | |
|---|--|---|-------------|-------------|---------------------|----------------|---------------------------------------|---------------------------------|
| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
| CONTROL OF DIARRHEAL DISEASES/WATER & SANITATION | | | | | | | | |
| Increase % children with diarrhea who receive ORS or recommended home fluids | % children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids (RHF) | KPC | 43.7% | 78.1% | 89.6% | 70.0% | 96.8% (93/96) | 39.7% (ORS) 3.2% (RHF) |
| | <u>Community ORS Distribution:</u> Number of ORS packets distributed by volunteers | Care Group Registers & Monthly Project Reports | N/A | 10,916 | N/A | N/A | N/A | N/A |
| | <u>Health Center ORS Stock:</u> % Health Centers without ORS stockouts each month | Health Center Registers & Monthly Project Reports | N/A | 86.0% | 70.5% | N/A | | N/A |
| Increase % children with diarrhea who are offered increased fluids during illness | % children 0-23 months with diarrhea in the last two weeks who were offered more fluids during the illness | KPC | 32.4% | 67.7% | 99.0% | 70.0% | 86.5% (83/96) CI (78.0-92.6) | 33.8% |
| Increase % children with | % children 0-23 months with diarrhea in the last 2 weeks who | KPC | 63.4% | 42.7% | 99.0% | 70.0% | 83.3% | 22.5% |

| M&E Matrix—Final Evaluation | | | | | | | | |
|---|--|--|-------------|-------------|---------------------|----------------|---|-----------|
| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
| diarrhea who are offered continued feeding during illness | were offered the same amount or more food during illness | | | | | | (80/96) CI (78.0-92.6) | |
| | <u>Zinc</u> : % children age 0-23 months with diarrhea in last two weeks who were treated with zinc supplements | KPC | N/A | N/A | N/A | | N/A | |
| | <u>Community Zinc Distribution</u> : Number of zinc treatment courses distributed by volunteers. | Care Group Registries & Monthly Project Reports | N/A | N/A | N/A | | N/A | |
| | <u>Health Center Zinc Stock</u> : % Health Centers without zinc stockouts every month | Health Center Registries & Monthly Project Reports | N/A | N/A | N/A | | 1 HC out of 10 had a three month zinc stock-out | |
| Increase % mothers of children 0-23 months who wash their hands with soap at appropriate times. | % mothers of children 0-23 months who live in a household with soap or a locally appropriate cleanser at the place for hand washing and who washed their hands with the cleanser after defecation and at one other appropriate time. | KPC | 18.0% | 38.5% | 89.6% | 70.0% | 90.6% (87/96) | 4.1% |
| | <u>Soap at the place for handwashing</u> : % mothers of children ages 0-23 months who live in a household with soap at the place for hand washing | KPC | 53.7% | 46.9% | 90.6% | N/A | 92.7% (89/96) | N/A |

M&E Matrix—Final Evaluation

| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
|---|---|--|-------------|-------------|---------------------|----------------|--------------------|------------------------|
| | <u>Safe feces disposal</u> : % mothers of children 0-23 months who disposed of the youngest child's feces safely the last time s/he passed a stool. | KPC | 58.2% | 79.2% | 94.8% | N/A | 86.5% (83/96) | 65.1% (Central-Est) |
| | <u>Latrines</u> : % mothers of children 0-23 months who have a covered latrine or toilet connected to a drainage system. | KPC | 9.0 | 14.6% | 69.8% | N/A | Not collected | 31% (Milieu rural) |
| | <u>Point of Use</u> : % households of children age 0-23 months that treat water effectively (includes boiling, chlorination, solar disinfection, and filtration). | KPC | 1.7% | 4.2% | 32.3% | N/A | 26.0% (25/96) | |
| | <u>Community Sur'eau Distribution</u> : Number of Sur'eau units distributed by volunteers | Care Group Registries & Promoter Reports | N/A | N/A | N/A | N/A | N/A | N/A |
| | <u>Two-week period prevalence of diarrhea</u> : % children age 0-23 months who had diarrhea at any time in prior 2 weeks. | KPC | 23.7% | 46.9% | 20.8% | N/A | 33.3% (32/96) | 22.9% (Central Est) |
| NUTRITION | | | | | | | | |
| Increase % newborns who were put to the breast within one hour of delivery and did not receive prelacteal foods | % newborns who were put to the breast within one hour of delivery and did not receive prelacteal foods | KPC | 62.0% | 79.2% | 85.4% | 75.0% | 96.9% (93/96) | 97% |

M&E Matrix—Final Evaluation

| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
|--|--|--|-------------|-------------|---------------------|----------------|-----------------------|--|
| | <u>Exclusive breastfeeding</u> : % children 0-5 months who were exclusively breastfed during the last 24 hours | KPC | 86.4% | 86.5% | 95.8% | N/A | 92.7% (89/96) | |
| Increase % infants and young children age 6-23 months fed according to minimum appropriate feeding practices | <u>Infant and young child feeding</u> : % infants and young children age 6-23 months fed according to minimum appropriate feeding practices | KPC | 25.6% | -- | 92.7% | 50% | Data analysis ongoing | 8.0% (4 groups of food) Central East |
| Achieve sustained adequate or catch-up growth in children who complete the Hearth program. | % children who completed the Hearth program achieve sustained adequate (400+ grams) or catch-up (over 700 grams) growth for at least 2 months after Hearth. | Registers maintained by promoters and specially trained volunteers for each cycle of Hearth. | N/A | 57.1% | 92.3% (862/934) | 60.0% | | |
| | <u>Dietary diversity of foods consumed by young children</u> : Mean number of food groups eaten in the last 24 hours by children age 6-23 months | KPC | 3.2 | 4.6 | 4.7 | N/A | | N/A |
| | <u>Vitamin A supplementation in the last 6 months</u> : % children age 6-23 months who received a dose of Vitamin A in the last 6 months (card-verified or mother's recall). | KPC | 81.7% | 80.2 | 90.6% | N/A | 86.4% (83/96) | 80.7% (Central Est) |
| | <u>Underweight</u> : % children 0-23 months who are underweight (-2 SD for the median weight for | Anthropometry during | 16.4% | 36.5% | 4.2% | N/A | 13.5% | N/A |

| M&E Matrix—Final Evaluation | | | | | | | | |
|--|--|---|-------------|-------------|---------------------|----------------|--------------------|-------------------------|
| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
| | age, according to WHO/ HCHS reference population). | KPC | | | | | (13/96) | |
| MALARIA | | | | | | | | |
| Increase % households with a child 0-23 months with an LLITN | % households with a child 0-23 months who own an LLITN | KPC | 3.0% | 75% | 72.9% | 50.0% | 80.2% (77/96) | 54.0% |
| | Number of LLITNs distributed by volunteers | Promoter distribution records | N/A | N/A | N/A | N/A | N/A | N/A |
| Increase % children 0-23 months who slept under an LLITN or ITN the previous night | % children age 0-23 months who slept under an insecticide-treated bed net the previous night (LLITN or ITN treated with the past six months). | KPC | 8.0% | 64.6% | 69.8% | 50.0% | 72.9% (70/96) | 75.0% |
| Increase % children 0-23 months with fever who receive appropriate antimalarial treatment within 24hours | % children 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began. | KPC | 17.1% | 49.0% | 94.8% | 60.0% | 84.3% (81/96) | 12.9% (Central East) |
| | Number of antimalarial treatment courses distributed by volunteers | Volunteer distributor registries and promoter reports | NA | NA | NA | NA | N/A | NA |
| Increase % women who slept under | % mothers of children 0-23 months who slept under an ITN during their pregnancy with the | KPC | 32.7% | 66.7% | 80.2% | 50.0% | 86.4% | 77.9% (Centr |

M&E Matrix—Final Evaluation

| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
|---|---|-------------|-------------|-------------|---------------------|----------------|--------------------|-----------------------|
| an ITN during last pregnancy | youngest child. | | | | | | (83/96) | al East) |
| | % mothers of children 0-23 months who took effective antimalarials during the pregnancy with the youngest child | KPC | N/A | N/A | N/A | N/A | N/A | N/A |
| | <u>Two-week period prevalence of fever</u> : Proportion of children age 0-23 months with a report of fever in the last 2 weeks | KPC | 37.0% | 53.13 % | 40.6% | N/A | 41.7% (40/96) | 27.0% (Central-East) |
| IMMUNIZATION | | | | | | | | |
| Increase coverage of DPT1 among children 12-23 months | % children 12-23 months who received DPT1 according to the vaccination card by the time of the survey | KPC | 62.5% | 63.5% | 86.5% | 80.0% | 86.4% (83/96) | 98.8% |
| | <u>Access to Immunization Services</u> : % children 12-23 months who received DPT1 according to card or mother's recall | KPC | 94.9% | 95.8% | 96.9% | N/A | 94.8% (91/96) | 99.0% |
| Increase coverage of DPT3 among children 12-23 months | % children 12-23 months who received DPT3 according to the vaccination card or health booklet | KPC | 61.0% | 62.5% | 85.4% | 80.0%. | 85.4% (82/96) | 94.6% |
| | <u>Health System Performance regarding Immunization Services</u> : % children 12-23 months who received DPT3 according to the vaccination card or mother's recall by the time of the survey. | KPC | 73.5% | 90.6% | 95.8% | N/A | 94.8% (91/96) | 95.4% |

M&E Matrix—Final Evaluation

| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
|--|---|-------------|-------------|-------------|---------------------|----------------|--------------------|-----------|
| Increase coverage of measles among children 12-23 months | % children age 12-23 months who received a measles vaccination according to the vaccination card or health booklet | KPC | 55.1% | 57.3% | 82.3% | 80.0% | 95.8% (92/96) | 87.1% |
| | Measles vaccination: % children age 12-23 months who received a measles vaccination according to the vaccination card or mother's recall | KPC | 89% | 90.6% | 96.9% | N/A | 94.8% (91/96) | 94.3% |
| | Vaccination card or health booklet –Ever had: % mothers of children 12-23 months who were ever given a vaccination card or health book for their youngest child 0-23 months | KPC | 94% | 97.9% | 100% | N/A | 100% (96/96) | N/A |
| | Vaccination card or health booklet (Currently have): % mothers of children 0-23 months who currently possess a vaccination card or health book for their youngest child 12-23 months. | KPC | 73.3% | 66.7% | 86.5% | N/A | 87.5% (84/96) | N/A |
| | Antigen and dose-specific coverage: % children 12-23 months who received each antigen and dose that is part of the national immunization schedule by the time of the survey as verified by vaccination card or health booklet | KPC | | | | | | |
| | BCG | | 72.0% | 64.6% | 86.5% | N/A | 85.4% (82/96) | N/A |
| | Polio 0 | | 69.7% | 61.5% | 86.5% | N/A | 79.1% | N/A |
| | Polio 1 | | 65.3% | 63.5% | 86.5% | N/A | 86.4% | N/A |

M&E Matrix—Final Evaluation

| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
|--------------------------------------|---|-------------|-------------|-------------|---------------------|----------------|--------------------|-----------|
| | | | | | | | (83/96) | |
| | Polio 2 | | 61.7% | 62.5% | 86.5% | N/A | 86.4% (83/96) | N/A |
| | Polio 3 | | 56.0% | 63.5% | 85.4% | N/A | 85.4% (82/96) | N/A |
| | Measles | | 55.1% | 57.3% | 82.3% | 80.0% | 95.8% (92/96) | |
| | Pentavalent 1(DPT1, Hib, and HepB) | | 62.5% | 63.5% | 86.5% | 80.0% | 86.4% (83/96) | |
| | Pentavalent 2 (DPT2, Hib, and HepB) | | 63.0% | 63.5% | 86.5% | N/A | 86.4% (83/96) | |
| | Pentavalent 3 (DPT3, Hib, and HepB) | | 61.0% | 62.5% | 85.4% | 80.0% | 85.4% (82/96) | |
| | Drop-Out Rate: (DPT1-DPT3) / DPT1: (% children age 12-23months who received DPT1 by 12months according to vaccination card or health booklet - % children age 12-23 months who received DPT3by 12 months according to vaccination card or health booklet) / % children age 12-23 months who receivedDPT1 by time of survey according to vaccination card or health booklet. | KPC | 2.5% | 1.6% | 1.1% | N/A | 1% (86.4-85.4) | |
| C-IMCI | | | | | | | | |
| Increase % mothers who recognize two | % mothers of children age 0-23 months who know at least two signs for seeking immediate care | KPC | 62.2 % | 86.5% | 96.9% | 80.0%. | 88.5% | |

| M&E Matrix—Final Evaluation | | | | | | | | |
|--|--|----------------------------------|-------------|----------------------------------|---------------------------------|----------------|--------------------|-----------|
| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
| or more danger signs of childhood illness | when their child is sick | | | | | | (85/96) | |
| CAPACITY BUILDING& SUSTAINABILITY | | | | | | | | |
| Mobilization of Community Volunteers through the Care Group Structure. | <u>Care Group Meetings:</u> Number and percent of Care Groups with at least two meetings per month | Promoter & Supervisor Reports | N/A | | 87.8% (183.6 /209) | | | |
| | <u>Care Group Attendance:</u> Number and percent of Care Groups with at least 70% volunteer attendance per month | Promoter & Supervisor Reports | N/A | 59.9 % (124 .64/ 208) | 84.1% (175.9 / 209) | 70% | | |
| | <u>Volunteer Attrition:</u> Percent of volunteers who drop out for reasons other than death or movement out of the area per year (beginning year 2). | Promoter & Supervisor Reports | N/A | Year 2: 0.29 % Year 3: 1.46 % | Year 4: 0.1% Year 5: 0.001 % | <10% | | |
| | <u>Care Group Performance:</u> Percent of Care Groups averaging 70%or above on verbal tests of intervention knowledge | Promoter & Supervisor Checklists | N/A | 93.5 % | 93.6% | 70% | | |
| | <u>Pastoral Groups:</u> Number and percent of pastoral groups that meet per month. | Supervisor or Monthly Reports | N/A | 76% 18.6 8/ 24.5 | 94.8% 22.8/2 4 | 70% | | |

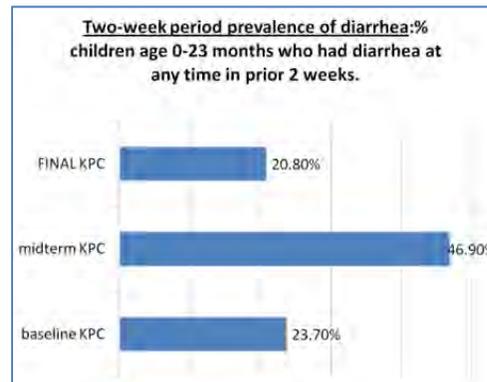
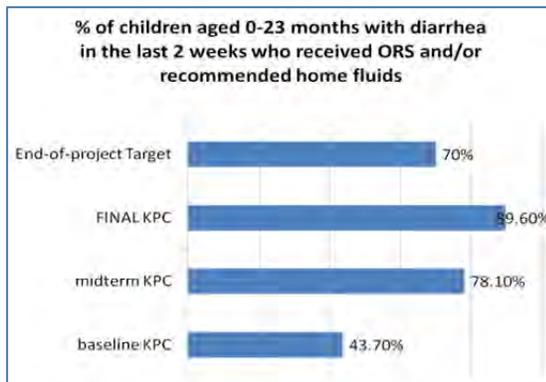
| M&E Matrix—Final Evaluation | | | | | | | | |
|---|---|-------------------------------|-------------|---------------------|---------------------|----------------|--------------------|---------------------------|
| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
| Integration of Care Group Model with Existing MOH C-IMCI Structure | <u>CHW Integration:</u> Average number and % Care Groups with a CHW in attendance in at least one meeting per month | Promoter & Supervisor Reports | N/A | 20.8 % 43.3 /208 | | 70% | | |
| | <u>TPS Integration:</u> Average number of Care Group supervision visits made per TPS per month | Promoter & Supervisor Reports | N/A | 2.1 | 4.6 (23.1/5) | 4 | | |
| Institutionalization of Project Health Information System with District Health Information System | <u>Institutionalization of C-HIS:</u> Number and % health facilities involved in management of C-HIS per month | Supervisor Monthly Reports | N/A | 100 % (11/11) | 100% (11/11) | 80% | 100% (10/10) | |
| | Institutionalization of Community-IMCI Number and % COSAs involved in management of C-HIS per month | Supervisor Monthly Reports | N/A | N/A | 96.1% (9.6/10) | 80% | | |
| | Institutionalization of Community-IMCI: Number and % COSAs with current action plans for community health | Supervisor Monthly Reports/ | N/A | 90.9 % (10/11) | 92.1% (9.2/10) | 80% | | |
| ADDITIONAL RAPID CATCH 2007 INDICATORS | | | | | | | | |
| | Pneumonia: % children age0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider. | KPC | 52.9% | 82.3% | 97.9% | N/A | 100% (96/96) | 49.8% Central east |

| M&E Matrix—Final Evaluation | | | | | | | | |
|-----------------------------|---|-------------|-------------|-------------|---------------------|----------------|--------------------|--------------------------------|
| Objectives | Indicators | Data Source | BL KPC 2008 | MT KPC 2010 | Final KPC July 2012 | Project Target | June 2012 M&E data | DHS -2010 |
| | TT Injections: % mothers with children age 0-23 months who received at least 2tetanus toxoid vaccinations before the birth of their youngest child | KPC | 52.3% | 86.5% | 96.9% | N/A | 88.5% (85/96) | 82% |
| | Skill Birth Attendance: % children age 0-23 months whose births were attended by skilled personnel. | KPC | 60.3% | 81.3% | 94.8% | N/A | 96.8% (93/96) | 60.3% |
| | Post-natal Visit: % children age 0-23 months who received a postnatal visit from an appropriate trained health worker within three days after birth | KPC | 32.7% | 66.7% | 89.6% | N/A | 88.5% (85/96) | 6.8%/29.8% (Central – East) |

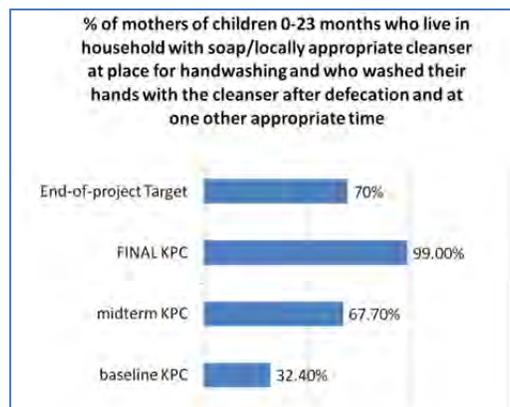
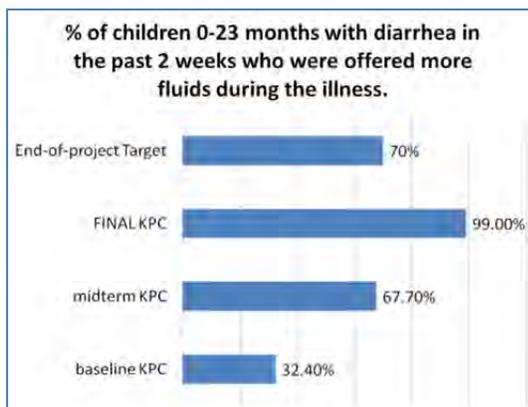
DISCUSSION

CONTROL OF DIARRHEAL DISEASES AND WATER AND SANITATION

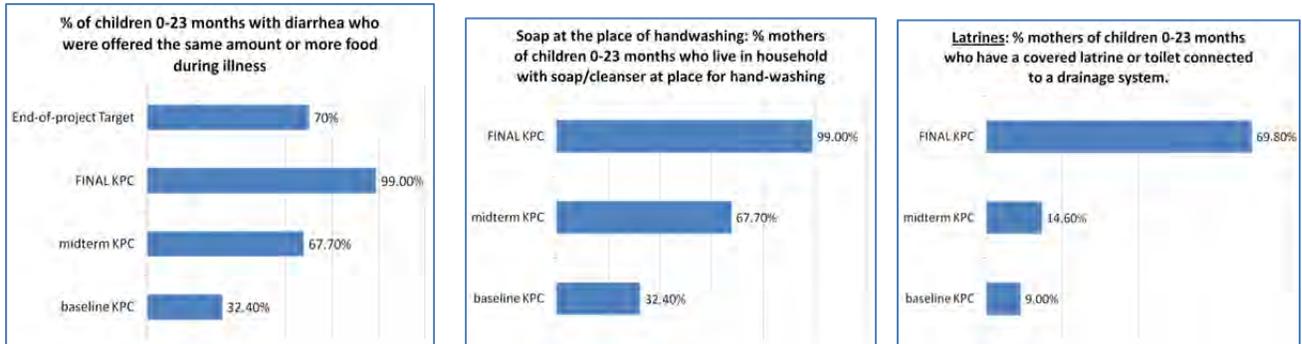
The CSP has effectively taught mothers appropriate care for diarrhea, and met all EOP targets for CDD. The MOH only distributes ORS via health centers. Recently, the MOH approved community distribution of ORS by CHWs, and WR has been promised funding from UNICEF to implement CCM in the district (including ORS distribution by CHWs) for 2013-2014. Only one



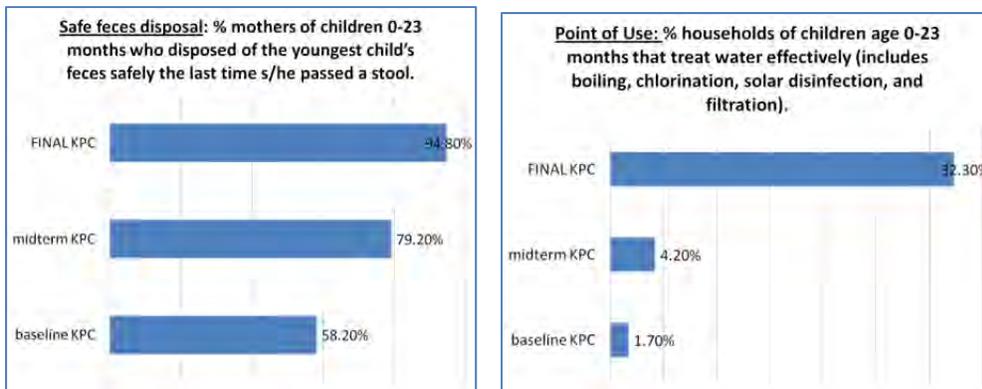
health center reported a temporary stock out of ORS for 2 weeks. Volunteers trained mothers to prepare and give additional fluids during home visits and PD-H. Program staff routinely monitored village-level data and followed-up with CG members when indicators dropped. There also were planning meetings with elected leaders to determine health priorities. Frequent supervision of CG by promoters as well as TPS during home visits also reinforced behavior change. MOH has instituted a treatment policy which includes ORS and zinc to treat diarrhea. Data on this is not collected by health centers. To establish a base-line, Operations Research is needed. MOH has not begun community-based zinc distribution. MOH has begun distribution of zinc to Health Centers but there have been stock-outs in some Health Centers.



Mothers were taught how to make and use tippy taps. At mid-term, the project stopped distributing soap. Frequent BCC messages about fecal danger were given during home visits by volunteers and during community meetings led by village elders. Follow-up visits by village elders, COSA and volunteers to homes where cases of diarrhea were noted. Action plans determined by COSA have included latrines as a priority. TPS are responsible for evaluating quality and usage. Some COSA have decided to fine families who do not have a functional latrine.

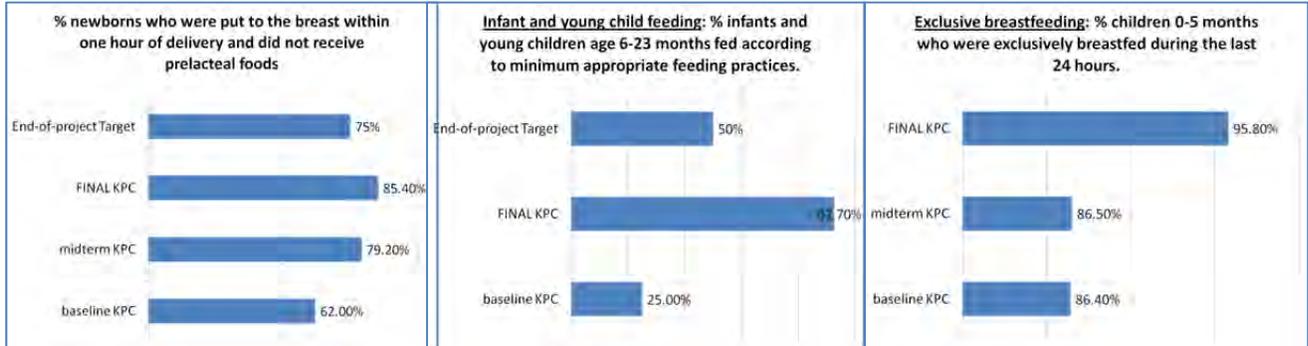


The MOH has re-started Sur'Eau distribution. UNICEF distributed Aquatabs for a few months. Twenty-nine percent of families boil their drinking water (which was the program message). CG and CHW were trained how to distribute Sur'Eau and Aquatabs, and on the key behaviors to target for C-CMI. By mid-term, the project was no longer distributing soap; and most homes visited did not have a hand-washing site. Project staff introduced the tippy-tap. Elected officials and project staff discussed the need to decrease dependency on outside resources during community meetings.



NUTRITION

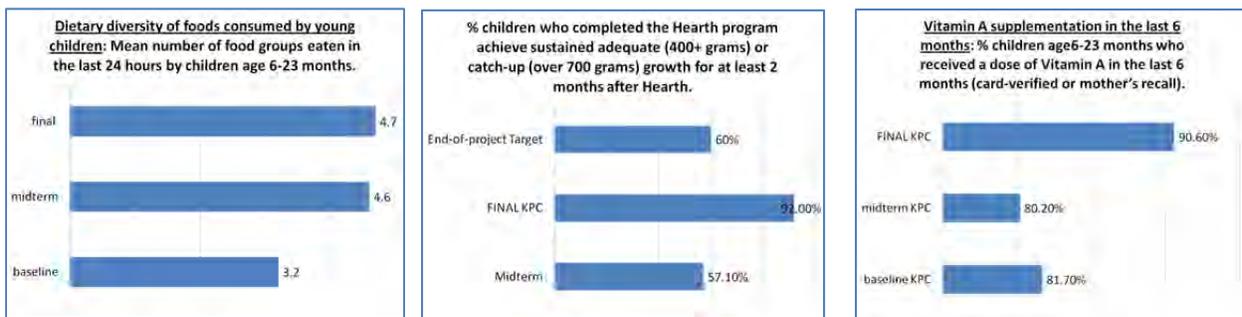
Health center personnel were trained to encourage mothers to breast feed their newborn within one hour of birth. Elected officials and project personnel also encouraged pregnant women to go to health centers to deliver their babies. Health center statistics indicate that there has been an



increase in assisted births. Focus group data also affirmed that very few women deliver at home now. Collaboration between project staff, health center personnel, and during PD-Hearth sessions included BCC for exclusive breastfeeding. Volunteers reinforced this message during home visits.

Frequency of feeding (part of the minimum appropriate feeding practices calculation) was not measured at the midterm survey. As there is a tradition in Burundi to prolong breastfeeding until 2 years of age, this indicator was met. However, among the children who were not being breastfed, this indicator was not, as milk is not part of childhood feeding practices and the majority of families do not raise cows.

By the mid-term, all CG groups had been trained in PD-Hearth. However, project staff observed that this strategy was not effective in the follow-up phase. Therefore, since the midterm, one CG volunteer was selected per group to receive additional training in PD-Hearth and given the



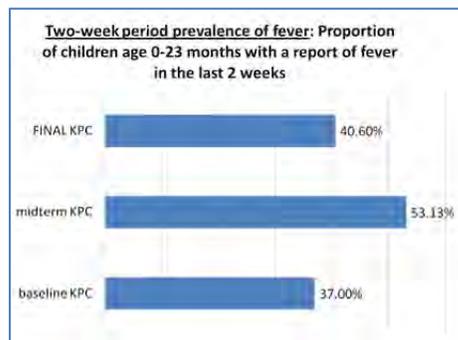
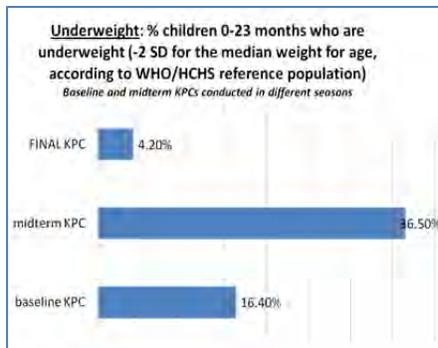
responsibility to follow-up on children who had finished the program. This shift in strategy proved to be effective in maintaining weight gain beyond 12 days. Results were also presented during PD-Hearth meetings as a way to encourage mothers to continue, for in Burundi, it is a shameful thing to have a malnourished child.

There was an improvement in dietary diversity, as children are now receiving on average 4.7 groups of food per day. The BCC message to have at least 3 groups of foods was mentioned during focus groups and individual interviews.

The Vitamin A supplementation indicator is based on mother’s recall. Vitamin A is distributed during mass vaccination campaigns and this data is not recorded in the health card.

Reduction in prevalence of underweight children

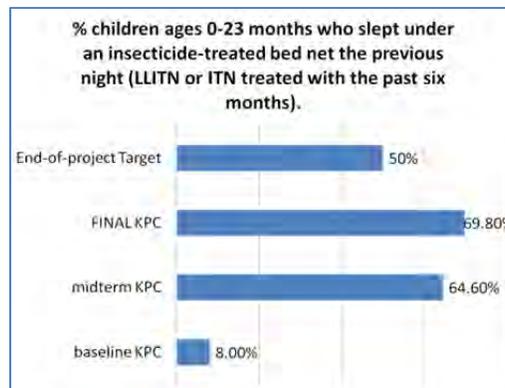
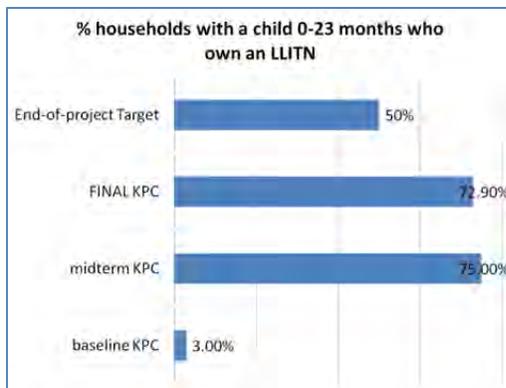
Baseline (April) data was collected at a different agricultural time than the midterm (Sept) and final evaluation (July) data which can partially explain the difference between baseline and midterm. The nutritional management of children -2SD was implemented during PD-Hearth. Children with - 3SD were referred to health centers for treatment with (Plumpynut)



Well-attended nutrition screenings (80% of expected children) permitted staff to quickly identify which children needed to be referred. District data confirmed the lower levels of malnutrition, and this change was mentioned during focus group discussions and individual interviews.

MALARIA

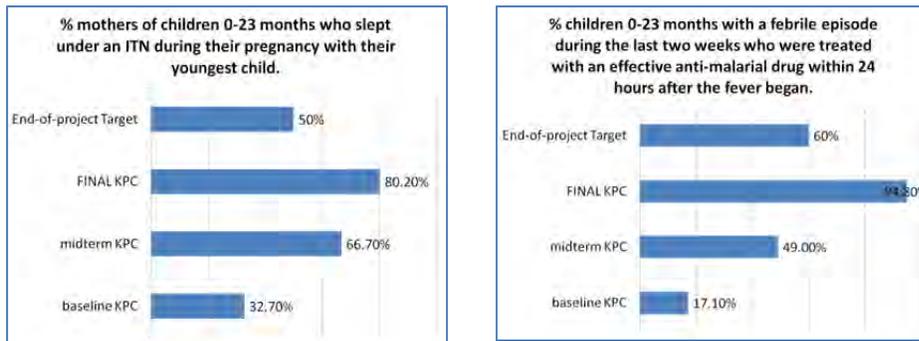
MOH current policy is to distribute Long-lasting ITNs (LLITN) once during pregnancy, and again when the child vaccinated against measles. There has not been another community-wide distribution since 2008 in this district. Promoters and CG volunteers participated in distribution



activities organized by community leaders in 2008. The project did not budget for the purchase of LLITNs.

Usage as greatly increased as households as LLITNs were distributed in 2008 after baseline data, and, because CG volunteers showed mothers how to hang the nets. CG volunteers appear to be making more referrals; free medical care for children under 5 and community messages during meetings have greatly increased the number of referrals for fever.

The MOH will be rolling-out CCM for malaria in areas where projects have their own supplies (this project had not included the purchase of treatment courses) However, WRB has been able to secure UNICEF funding for CCM for next year, which will include medication, and will use



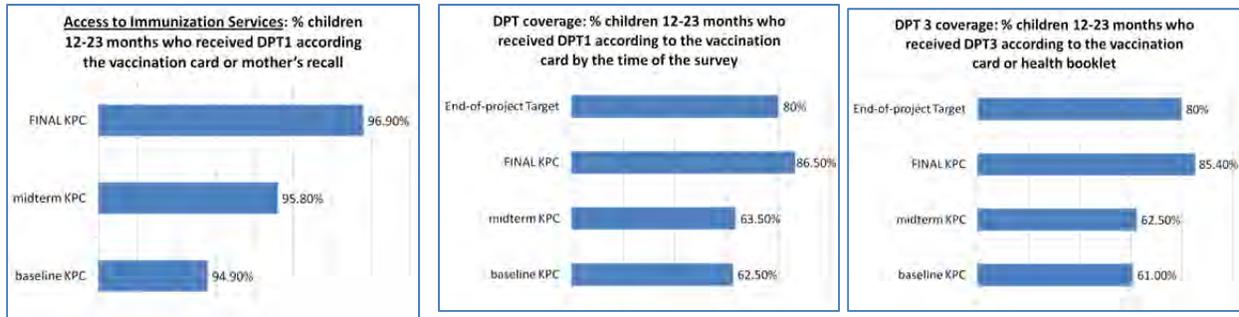
the Care Group structures already developed by this CSP.

The CSP director has been actively involved at the national level in the creation of tools and training of personnel in areas where treatment courses have been available. Recently, CCM for malaria became MOH national strategy.

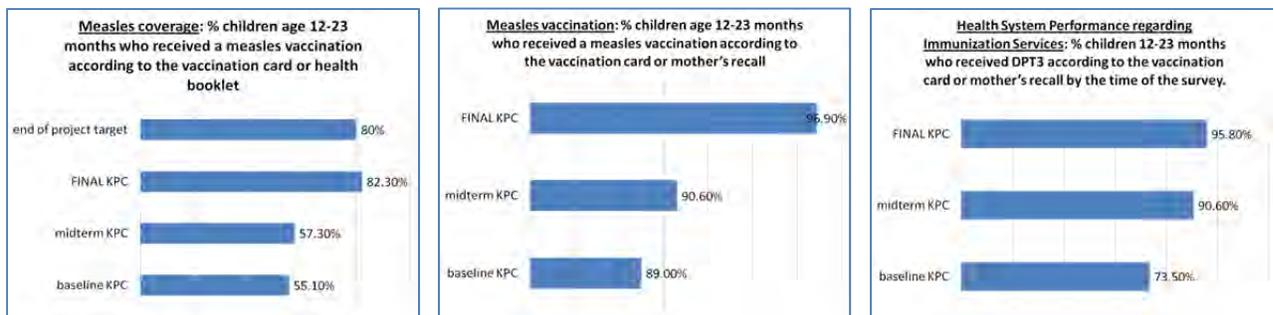
The increase in pregnant women receiving prenatal care has also increased the number of pregnant women who received and slept under a LLITN. Currently the MOH does not have ITNs available for distribution. However, the MOH stated their plans for another LLITN distribution soon. IPT for pregnant women is not a current policy in Burundi.

IMMUNIZATION

CG volunteers and health promoters have been actively involved in MOH immunization activities. This high level of vaccination coverage is also reported by district health personnel. At the provincial level, Kibuye District is being used as a model.

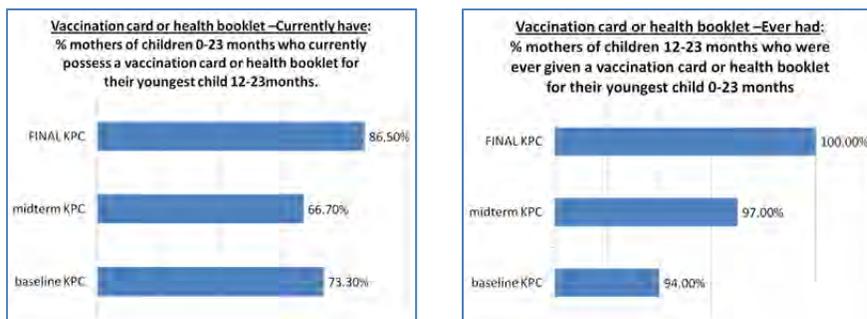


Project staff initiated the follow-up of lost cases as project data was different from MOH data. It was discovered that these children had been vaccinated, but, the data had not been registered at the health centers. Note discrepancies between indicators based on recall vs. card. Note



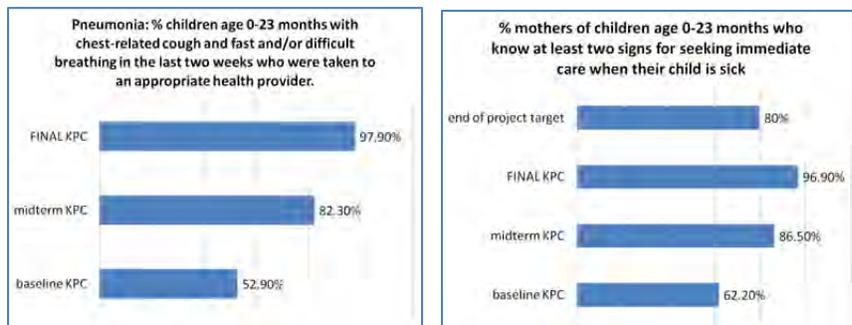
discrepancies above between indicators based on recall (97%) vs. card (82%). Health centers received a new shipment of health cards and could re-issue cards that had been lost.

MOH personnel indicated that the vaccine for pneumonia has recently been added (since fall 2011). Project staff initiated the follow-up of lost cases as project data was different from MOH data. It was discovered that these children had been vaccinated, but, the data had not been registered at the health centers.



C-IMCI

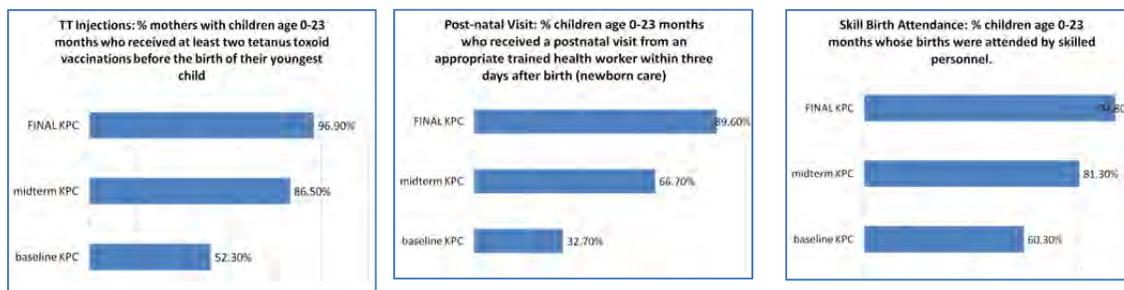
C-IMCI was a major focus of the CSP activities, and indicators correspondingly increased. See intervention-specific indicators above.



ADDITIONAL RAPID CATCH 2007 INDICATORS

There was a higher level of access to health care as children under the age of 5 and pregnant women have free services. BCC during HV as well as during community meetings encouraged mothers to take their children for care should one of the danger signs be present.

District HIS indicated that there is adequate coverage for the first 2 doses of TT; however coverage drops for 5 doses.



Health center personnel, COSA members and village leaders all indicated that there are fewer women delivering at home. For example, in one commune the rate is currently 2 to 3 women of the 40 who are in labor. This level of coverage is linked to the newborn care being given while the mother is still in the health center. DHS data for 2010 made the distinction between postpartum and postnatal care. For the East Central Region, postpartum care was 28.9%, while postnatal at 2 days was 6.8%. IT was observed during the health center visits, that personnel make no distinction between postpartum and postnatal care at 15 days and 45 days after birth. Personnel also requested that postnatal care be the focus of future activities.

BCC messages included during home visits and community meetings focused on the recognition of danger signs.

CAPACITY-BUILDING AND SUSTAINABILITY

Volunteer attrition data for years 4 and 5:
 Numerator: average number of care groups with at least 70% attendance per month;
 Denominator: total number of care groups.
 Note: For Year 5, the only cause of attrition was the death of the volunteer.

From a sample of 47 care groups verbally tested in year 5 (44/47) 93.6% care groups averaged 70% or above)

Numerator: average number of pastoral care groups that met, per month; Denominator: average total number of pastoral care groups.

Numerator: average number of care groups per month with at least 1 CHW in attendance in at least 1 meeting; Denominator: total number of care groups

There was an increase in supervisory visits by TPS, as they could go on joint visits with promoters using project motorcycles.

All 3 health centers visited indicated that their staff was involved in data analysis with CSP promoters, and the joint decisions about priorities based on the analysis.

Health center personnel, TPS, COSA and project staff (Promoters) were involved in the preparation and implementation of community health plans. Focus group data indicated that the 3 COSA interviewed did have community health action plans.

| Capacity Building and Sustainability: Mobilization of Community Volunteers through the Care Group Structure | | | |
|--|-----------------------------------|-------------------------------------|-------------------------------|
| Number and percent of Care Groups with at least two meetings per month: 87.8% (Final KPC) 183/ 209 total Care Groups. | | | |
| Care Group Attendance: Number and percent of Care Groups with at least 70% volunteer attendance per month. | Midterm 59.9% (124/ 208) | Final KPC 84.1% (176/ 209) | End of Project target: 70% |

| Volunteer attrition: Percent of volunteers who drop out for reasons other than death or movement out of the area. | | | |
|---|--------|---------|---|
| End of Project target: < 10% | | | |
| Year 2 | Year 3 | Year 4: | Year 5: |
| 0.29% | 1.46% | 0.1% | 0.001% (In year 5, volunteers only dropped out due to death) |

| Care Group Performance: | | |
|---|---------------------|-------------------------------|
| % of Care Groups averaging 70% or above on verbal tests of intervention knowledge. | | |
| Midterm KPC: 93.5% | Final KPC: 93.6% | End of Project Target: 70% |

Project resource requirements of the survey, namely monetary costs and amount of staff time devoted to KPC activities

The CSP Director spent a full 2 weeks on the KPC Survey. Melene Kabadege, the WR Regional Technical Advisor, spent 4 weeks (July 2-31), as described below. The rest of the staff (Training Officer, Supervisors, Promoters) devoted one full week to the KPC. Olga Wollinka, WR HO Backstop spent another week on writing up the KPC report in the US. We estimate that non-personnel costs directly related to the KPC totaled about \$2,200. This includes travel costs, fuel, printing, etc.

Training schedule for supervisors and interviewers

| Topic | Time |
|--|-------------------------------|
| Review KPC questionnaire and translation | Two days (July 2-3, 2012) |
| KPC Refresher training for supervisors | Two days (July 4-5, 2012) |
| KPC Refresher training for enumerators | Two days (July 5-6, 2012) |
| Piloting KPC | Five days (July 7, 2012) |
| KPC data collection and entry | Five days (July 9-13, 2012) |
| KPC double entry & cleaning | Five days (July 16-20, 2012) |
| KPC Data analysis and Tables | Seven Days (July 23-31, 2012) |

The following annexes will help readers of this report to answer additional questions that they may have after reading the formal report:

Annex 1: Raw Data

Annex 2: Sampling Frame

Annex 3: Survey questionnaires in both English and Kirundi

ANNEX 1: RAW DATA

0-5 MONTHS

Commune

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Bukirasazi | 24 | 25.0 | 25.0 | 25.0 |
| | Buraza | 24 | 25.0 | 25.0 | 50.0 |
| | Itaba | 24 | 25.0 | 25.0 | 75.0 |
| | Makebuko | 24 | 25.0 | 25.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Child Gender

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 41 | 42.7 | 42.7 | 42.7 |
| | Female | 55 | 57.3 | 57.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q33 Child age in months

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 13 | 13.5 | 13.5 | 13.5 |
| | 1 | 22 | 22.9 | 22.9 | 36.5 |
| | 2 | 24 | 25 | 25 | 61.5 |
| | 3 | 15 | 15.6 | 15.6 | 77.1 |
| | 4 | 14 | 14.6 | 14.6 | 91.7 |
| | 5 | 8 | 8.3 | 8.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q1. Have you ever attended school?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 22 | 22.9 | 22.9 | 22.9 |
| | Yes | 74 | 77.1 | 77.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q2. What is the highest grade or level of school you have completed?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid | 34 | 35.4 | 35.4 | 35.4 |
| No School | 1 | 1.0 | 1.0 | 36.5 |
| Primary | 58 | 60.4 | 60.4 | 96.9 |
| Secondary | 3 | 3.1 | 3.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q3. How many people live in your household?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Valid 2 | 1 | 1.0 | 1.0 | 1.0 |
| 3 | 24 | 25.0 | 25.0 | 26.0 |
| 4 | 19 | 19.8 | 19.8 | 45.8 |
| 5 | 16 | 16.7 | 16.7 | 62.5 |
| 6 | 12 | 12.5 | 12.5 | 75.0 |
| 7 | 9 | 9.4 | 9.4 | 84.4 |
| 8 | 5 | 5.2 | 5.2 | 89.6 |
| 9 | 4 | 4.2 | 4.2 | 93.8 |
| 10 | 5 | 5.2 | 5.2 | 99.0 |
| 11 | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4. How long after birth did you first put (name of child) to the breast?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|-----------|---------|---------------|--------------------|
| Valid | 1 | 1.0 | 1.0 | 1.0 |
| Immediately/within first hour after delivery | 86 | 89.6 | 89.6 | 90.6 |
| Same day, After the first hour after delivery | 9 | 9.4 | 9.4 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5. Did you give anything to (name of child) before the first breastfeeding?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1 | 1.0 | 1.0 | 1.0 |
| Yes | 6 | 6.2 | 6.2 | 7.3 |
| No | 89 | 92.7 | 92.7 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6. Did (NAME) drink/eat:

Q6A. Breast milk?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1 | 1.0 | 1.0 | 1.0 |
| Yes | 95 | 99.0 | 99.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6B. Plain water?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1 | 1.0 | 1.0 | 1.0 |
| No | 95 | 99.0 | 99.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6C. Cow Milk

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 2 | 2.1 | 2.1 | 2.1 |
| No | 94 | 97.9 | 97.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6D. Banana Juice

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 3 | 3.1 | 3.1 | 3.1 |
| No | 93 | 96.9 | 96.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6E. Commercially produced infant formula?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1 | 1.0 | 1.0 | 1.0 |
| No | 95 | 99.0 | 99.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6F. Any fortified, commercially available infant and young child food (e.g. Cerelac)?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1 | 1.0 | 1.0 | 1.0 |
| No | 95 | 99.0 | 99.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6G. Any (other) porridge or gruel?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1 | 1.0 | 1.0 | 1.0 |
| No | 95 | 99.0 | 99.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

0-23 MONTHS

Commune

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid Bukirasazi | 24 | 25.0 | 25.0 | 25.0 |
| Buraza | 24 | 25.0 | 25.0 | 50.0 |
| Itaba | 24 | 25.0 | 25.0 | 75.0 |
| Makebuko | 24 | 25.0 | 25.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Age of the Mothers

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 18 | 1 | 1.0 | 1.0 | 1.0 |
| | 19 | 3 | 3.1 | 3.1 | 4.2 |
| | 20 | 4 | 4.2 | 4.2 | 8.3 |
| | 21 | 8 | 8.3 | 8.3 | 16.7 |
| | 22 | 2 | 2.1 | 2.1 | 18.8 |
| | 23 | 5 | 5.2 | 5.2 | 24.0 |
| | 24 | 1 | 1.0 | 1.0 | 25.0 |
| | 25 | 7 | 7.3 | 7.3 | 32.3 |
| | 26 | 11 | 11.5 | 11.5 | 43.8 |
| | 27 | 7 | 7.3 | 7.3 | 51.0 |
| | 28 | 4 | 4.2 | 4.2 | 55.2 |
| | 29 | 5 | 5.2 | 5.2 | 60.4 |
| | 30 | 10 | 10.4 | 10.4 | 70.8 |
| | 31 | 4 | 4.2 | 4.2 | 75.0 |
| | 32 | 6 | 6.2 | 6.2 | 81.2 |
| | 33 | 3 | 3.1 | 3.1 | 84.4 |
| | 34 | 4 | 4.2 | 4.2 | 88.5 |
| | 35 | 1 | 1.0 | 1.0 | 89.6 |
| | 36 | 2 | 2.1 | 2.1 | 91.7 |
| | 37 | 1 | 1.0 | 1.0 | 92.7 |
| | 38 | 1 | 1.0 | 1.0 | 93.8 |
| | 39 | 3 | 3.1 | 3.1 | 96.9 |
| | 40 | 2 | 2.1 | 2.1 | 99.0 |
| | 43 | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Child Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|--------|----|-------|-------|-------|
| Valid | Male | 43 | 44.8 | 44.8 | 44.8 |
| | Female | 53 | 55.2 | 55.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q1. Have you ever attended school?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 19 | 19.8 | 19.8 | 19.8 |
| | Yes | 77 | 80.2 | 80.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q2. What is the highest grade or level of school you have completed?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|-----------|---------|---------------|--------------------|
| Valid | Primary | 56 | 58.3 | 72.7 | 72.7 |
| | Secondary | 6 | 6.2 | 7.8 | 80.5 |
| | Other | 15 | 15.6 | 19.5 | 100.0 |
| | Total | 77 | 80.2 | 100.0 | |
| Missing | System | 19 | 19.8 | | |
| Total | | 96 | 100.0 | | |

Q3. How many people live in your household?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | 3 | 18 | 18.8 | 18.8 | 18.8 |
| | 4 | 18 | 18.8 | 18.8 | 37.5 |
| | 5 | 25 | 26.0 | 26.0 | 63.5 |
| | 6 | 12 | 12.5 | 12.5 | 76.0 |
| | 7 | 12 | 12.5 | 12.5 | 88.5 |
| | 8 | 5 | 5.2 | 5.2 | 93.8 |
| | 9 | 3 | 3.1 | 3.1 | 96.9 |
| | 10 | 3 | 3.1 | 3.1 | 100.0 |

Q3. How many people live in your household?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 3 | 18 | 18.8 | 18.8 | 18.8 |
| | 4 | 18 | 18.8 | 18.8 | 37.5 |
| | 5 | 25 | 26.0 | 26.0 | 63.5 |
| | 6 | 12 | 12.5 | 12.5 | 76.0 |
| | 7 | 12 | 12.5 | 12.5 | 88.5 |
| | 8 | 5 | 5.2 | 5.2 | 93.8 |
| | 9 | 3 | 3.1 | 3.1 | 96.9 |
| | 10 | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4. During your pregnancy with (name of child) did you sleep under a mosquito net?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 19 | 19.8 | 19.8 | 19.8 |
| | Yes | 77 | 80.2 | 80.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5. Did you sleep under the net all the time, most of the time, some of the time, or occasionally?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------------|-----------|---------|---------------|--------------------|
| Valid | | 19 | 19.8 | 19.8 | 19.8 |
| | All the time | 74 | 77.1 | 77.1 | 96.9 |
| | Most of the time | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q6. During your pregnancy with (Name), did you receive antenatal care?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | Yes | 96 | 100.0 | 100.0 | 100.0 |

Q7. During your pregnancy with (Name), how many months pregnant were you when you first received antenatal care?

| | Months | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | 1 | 2 | 2.1 | 2.1 | 2.1 |
| | 2 | 4 | 4.2 | 4.2 | 6.2 |
| | 3 | 62 | 64.6 | 64.6 | 70.8 |
| | 4 | 20 | 20.8 | 20.8 | 91.7 |
| | 5 | 5 | 5.2 | 5.2 | 96.9 |
| | 6 | 2 | 2.1 | 2.1 | 99.0 |
| | 7 | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q8. During your pregnancy with (Name) did you receive an injection in the arm to prevent the baby from getting tetanus, that is convulsions after birth?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 14 | 14.6 | 14.6 | 14.6 |
| | Yes | 82 | 85.4 | 85.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q9. While pregnant with (name), how many times did you receive such an injection?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|---------------|-----------|---------|---------------|--------------------|
| Valid | One | 42 | 43.8 | 51.2 | 51.2 |
| | Two | 30 | 31.2 | 36.6 | 87.8 |
| | Three or more | 10 | 10.4 | 12.2 | 100.0 |
| | Total | 82 | 85.4 | 100.0 | |
| Missing | System | 14 | 14.6 | | |

Q9. While pregnant with (name), how many times did you receive such an injection?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|---------------|-----------|---------|---------------|--------------------|
| Valid | One | 42 | 43.8 | 51.2 | 51.2 |
| | Two | 30 | 31.2 | 36.6 | 87.8 |
| | Three or more | 10 | 10.4 | 12.2 | 100.0 |
| | Total | 82 | 85.4 | 100.0 | |
| Missing | System | 14 | 14.6 | | |
| Total | | 96 | 100.0 | | |

Q10. Did you receive any tetanus toxoid injection at any time before that pregnancy, including during a previous pregnancy or between pregnancies?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 3 | 3.1 | 3.1 | 3.1 |
| | Yes | 93 | 96.9 | 96.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q11. Before the pregnancy with (Name), how many times did you receive a tetanus injection?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|---------------|-----------|---------|---------------|--------------------|
| Valid | Two | 8 | 8.3 | 8.6 | 8.6 |
| | Three or More | 85 | 88.5 | 91.4 | 100.0 |
| | Total | 93 | 96.9 | 100.0 | |
| Missing | System | 3 | 3.1 | | |
| Total | | 96 | 100.0 | | |

Q12. Who assisted with the delivery of (Name)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Doctor | 6 | 6.2 | 6.2 | 6.2 |
| | Nurse | 82 | 85.4 | 85.4 | 91.7 |

| | | | | |
|-----------------------------|----|-------|-------|-------|
| Midwife | 3 | 3.1 | 3.1 | 94.8 |
| Traditional Birth Attendant | 4 | 4.2 | 4.2 | 99.0 |
| No One | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q13. After (Name) was born, did any health care provider or traditional birth attendant check on (Name's) health?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 8 | 8.3 | 8.3 | 8.3 |
| Yes | 88 | 91.7 | 91.7 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q14. How many hours, days or weeks after the birth of (Name) did the first check take place?

Q14AHours

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid 0 | 52 | 54.2 | 65.0 | 65.0 |
| 1 | 12 | 12.5 | 15.0 | 80.0 |
| 2 | 5 | 5.2 | 6.2 | 86.2 |
| 3 | 5 | 5.2 | 6.2 | 92.5 |
| 4 | 2 | 2.1 | 2.5 | 95.0 |
| 8 | 2 | 2.1 | 2.5 | 97.5 |
| 12 | 1 | 1.0 | 1.2 | 98.8 |
| 13 | 1 | 1.0 | 1.2 | 100.0 |
| Total | 80 | 83.3 | 100.0 | |
| Missing System | 16 | 16.7 | | |
| Total | 96 | 100.0 | | |

Q14BDays

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
|--|-----------|---------|---------------|--------------------|

| | | | | | |
|---------|--------|----|-------|-------|-------|
| Valid | 1 | 5 | 5.2 | 83.3 | 83.3 |
| | 2 | 1 | 1.0 | 16.7 | 100.0 |
| | Total | 6 | 6.2 | 100.0 | |
| Missing | System | 90 | 93.8 | | |
| Total | | 96 | 100.0 | | |

Q14Cweeks

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | 1 | 1 | 1.0 | 50.0 | 50.0 |
| | 6 | 1 | 1.0 | 50.0 | 100.0 |
| | Total | 2 | 2.1 | 100.0 | |
| Missing | System | 94 | 97.9 | | |
| Total | | 96 | 100.0 | | |

Q15. Who checked on (Name's) health at that time?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | | 8 | 8.3 | 8.3 | 8.3 |
| | Doctor | 6 | 6.2 | 6.2 | 14.6 |
| | Nurse | 82 | 85.4 | 85.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q16. Are you currently doing something or using any method to delay or avoid getting pregnant?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 48 | 50.0 | 50.0 | 50.0 |
| | Yes | 48 | 50.0 | 50.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q17. Which method are you (or your husband/ partner) using?

Q17A FEMALE STERILIZATION

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q17B MALE STERILIZATION

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q17C PILL

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 91 | 94.8 | 94.8 | 94.8 |
| Yes | 5 | 5.2 | 5.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q17D IUD

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q17E INJECTABLES

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 75 | 78.1 | 78.1 | 78.1 |
| Yes | 21 | 21.9 | 21.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q17F MPLANTS

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 82 | 85.4 | 85.4 | 85.4 |
| Yes | 14 | 14.6 | 14.6 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q17G CONDOM

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 95 | 99.0 | 99.0 | 99.0 |
| | Yes | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q17H FEMALE CONDOM

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q17I DIAPHRAGM

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q17J FOAM/JELLY

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q17K LACTATIONAL AMEN. METHOD

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q17L STANDARD DAYS METHOD/ CYCLEBEADS

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|-------|----|-------|-------|-------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q17M RHYTHM METHOD (OTHER THAN STANDARD DAYS)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q17N WITHDRAWAL

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 95 | 99.0 | 99.0 | 99.0 |
| | Yes | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

170. OTHER - ABSTINENCE

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | | 46 | 47.9 | 47.9 | 47.9 |
| | No | 49 | 51.0 | 51.0 | 99.0 |
| | Yes | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q18. What are the signs of illness that would indicate your child needs treatment?

Q18A Don't Know

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q18B Looks Unwell Or Not Playing Normally

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 19 | 19.8 | 19.8 | 19.8 |
| | Yes | 77 | 80.2 | 80.2 | 100.0 |

Q18A Don't Know

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Total | 96 | 100.0 | 100.0 | |

Q18C Not Eating Or Drinking

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 8 | 8.3 | 8.3 | 8.3 |
| Yes | 88 | 91.7 | 91.7 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q18D Lethargic Or Difficult To Wake

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 65 | 67.7 | 67.7 | 67.7 |
| Yes | 31 | 32.3 | 32.3 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q18E High Fever

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 2 | 2.1 | 2.1 | 2.1 |
| Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q18F Fast Or Difficult Breathing

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 40 | 41.7 | 41.7 | 41.7 |
| Yes | 56 | 58.3 | 58.3 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q18G Vomits Everything

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 21 | 21.9 | 21.9 | 21.9 |
| | Yes | 75 | 78.1 | 78.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q18H Convulsions

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 90 | 93.8 | 93.8 | 93.8 |
| | Yes | 6 | 6.2 | 6.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q18I Gets worse despite home care

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 45 | 46.9 | 46.9 | 46.9 |
| | Yes | 51 | 53.1 | 53.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q18J Looks dehydrated (dry mouth or no tears)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 78 | 81.2 | 81.2 | 81.2 |
| | Yes | 18 | 18.8 | 18.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q18K Other

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | | 57 | 59.4 | 59.4 | 59.4 |
| | Constipation | 1 | 1.0 | 1.0 | 60.4 |
| | Cough | 8 | 8.3 | 8.3 | 68.8 |
| | Diarrhea | 23 | 24.0 | 24.0 | 92.7 |

| | | | | |
|--------------------------------|----|-------|-------|-------|
| Diarrhea; Cough | 6 | 6.2 | 6.2 | 99.0 |
| Diarrhea; Cough, eye infection | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q19. Did (NAME) experience any of the following in the past two weeks?

Q19A Diarrhea

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 76 | 79.2 | 79.2 | 79.2 |
| Yes | 20 | 20.8 | 20.8 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q19B Cough

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 70 | 72.9 | 72.9 | 72.9 |
| Yes | 26 | 27.1 | 27.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q19C Difficult Breathing

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 86 | 89.6 | 89.6 | 89.6 |
| Yes | 10 | 10.4 | 10.4 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q19D Fast Breathing/Short, Quick Breaths

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 87 | 90.6 | 90.6 | 90.6 |
| Yes | 9 | 9.4 | 9.4 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q19E Fever

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 76 | 79.2 | 79.2 | 79.2 |
| | Yes | 20 | 20.8 | 20.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q19F Malaria

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 77 | 80.2 | 80.2 | 80.2 |
| | Yes | 19 | 19.8 | 19.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q19G Convulsion

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q19H None

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 53 | 55.2 | 55.2 | 55.2 |
| | 1 | 43 | 44.8 | 44.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q19I Other

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------------|-----------|---------|---------------|--------------------|
| Valid | | 95 | 99.0 | 99.0 | 99.0 |
| | Eye infection | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q20 Do you treat your water in any way to make it safer for drinking?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | Yes | 69 | 71.9 | 71.9 | 71.9 |
| | No | 27 | 28.1 | 28.1 | 100.0 |

Q20 Do you treat your water in any way to make it safer for drinking?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid Yes | 69 | 71.9 | 71.9 | 71.9 |
| No | 27 | 28.1 | 28.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q21. IF YES, what do you usually do to the water to make it safer to drink?

Q21A Let It Stand And Settle/Sedimentation

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 90 | 93.8 | 93.8 | 93.8 |
| Yes | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q21B Strain It Through Cloth

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q21C Boil

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 68 | 70.8 | 70.8 | 70.8 |
| Yes | 28 | 29.2 | 29.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q21D Add Bleach/Chlorine

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 89 | 92.7 | 92.7 | 92.7 |
| Yes | 7 | 7.3 | 7.3 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q21E Water Filter (Ceramic, Sand, Composite)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q21F Solar Disinfection

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q21G Don't Know

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q21H Other

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
| Valid | 57 | 59.4 | 59.4 | 59.4 |
| Cleaning and covering water contener | 5 | 5.2 | 5.2 | 64.6 |
| Cleaning water contener | 1 | 1.0 | 1.0 | 65.6 |
| Covering water | 11 | 11.5 | 11.5 | 77.1 |
| Covering water contener | 11 | 11.5 | 11.5 | 88.5 |
| Keep water in cleaned contener | 1 | 1.0 | 1.0 | 89.6 |
| Keep water in cleaned and covered contener | 1 | 1.0 | 1.0 | 90.6 |
| Keep water in cleaned contener | 2 | 2.1 | 2.1 | 92.7 |
| Keep water in cleaned Jerrican | 1 | 1.0 | 1.0 | 93.8 |
| Keep water in Covered and cleaned contener | 5 | 5.2 | 5.2 | 99.0 |
| Keep water in Jerrican | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

| [Q22. When do you wash your hands?](#)

Q22A Never

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 96 | 100.0 | 100.0 | 100.0 |

Q22B Before Food Preparation

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 6 | 6.2 | 6.2 | 6.2 |
| Yes | 90 | 93.8 | 93.8 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q22C Before Feeding Child

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 2 | 2.1 | 2.1 | 2.1 |
| Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q22D After Defecation/Visiting The Toilet

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 1 | 1.0 | 1.0 | 1.0 |
| Yes | 95 | 99.0 | 99.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q22E After Attending To A Child Who Has Defecated/Soiled

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 3 | 3.1 | 3.1 | 3.1 |
| Yes | 93 | 96.9 | 96.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q22F Other

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------------------------|-----------|---------|---------------|--------------------|
| Valid | 50 | 52.1 | 52.1 | 52.1 |
| After field work | 1 | 1.0 | 1.0 | 53.1 |
| After food preparation | 1 | 1.0 | 1.0 | 54.2 |
| After getting up and after field work | 1 | 1.0 | 1.0 | 55.2 |
| Before cleaning dishes | 5 | 5.2 | 5.2 | 60.4 |
| Before eating | 34 | 35.4 | 35.4 | 95.8 |
| Before eating, after field work | 1 | 1.0 | 1.0 | 96.9 |
| Before travelling | 1 | 1.0 | 1.0 | 97.9 |
| Before washing dishes | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q23 Can you show me where you usually wash your hands and what you use to wash hands?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------------------------|-----------|---------|---------------|--------------------|
| Valid | 4 | 4.2 | 4.2 | 4.2 |
| Inside/Near Toilet Facility | 19 | 19.8 | 19.8 | 24.0 |
| Inside/Near Kitchen/Cooking Place | 47 | 49.0 | 49.0 | 72.9 |
| Elsewhere In Yard | 21 | 21.9 | 21.9 | 94.8 |
| Outside Yard | 5 | 5.2 | 5.2 | 100.0 |
| No Specific Place | | | | |
| Total | 96 | 100.0 | 100.0 | |

Q24 OBSERVATION ONLY: Is there soap or detergent or locally used cleansing agent?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 87 | 90.6 | 95.6 | 95.6 |
| Soap | 4 | 4.2 | 4.4 | 100.0 |
| Ash | | | | |
| Total | 91 | 94.8 | 100.0 | |

| | | | | |
|---------|--------|----|-------|--|
| Missing | System | 5 | 5.2 | |
| Total | | 96 | 100.0 | |

Q25 What kind of toilet facility do you have? Can I see it?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------|-----------|---------|---------------|--------------------|
| Valid | Open latrine | 29 | 30.2 | 30.2 | 30.2 |
| | Closed latrine | 65 | 67.7 | 67.7 | 97.9 |
| | Flush toilet | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q26. The last time (name of child) passed stools, where were the feces disposed of?

Q26A Disposed into a latrine or toilet facility

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 5 | 5.2 | 5.2 | 5.2 |
| | Yes | 91 | 94.8 | 94.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q26B Disposed into a garbage/trash bin

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 95 | 99.0 | 99.0 | 99.0 |
| | Yes | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q26C1 Disposed of somewhere near the house: Dug and buried

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q26C2 Disposed of somewhere near the house: Did not bury

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q26D1 Disposed of somewhere far from the house: Dug and buried

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 95 | 99.0 | 99.0 | 99.0 |
| | Yes | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q26D2 Disposed of somewhere far from the house: Did not bury

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q26E Don't know

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q27 Does your household have any mosquito nets that can be used while sleeping?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q28 Which brand of bed net do you own?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------|-----------|---------|---------------|--------------------|
| Valid | | 28 | 29.2 | 29.2 | 29.2 |
| | Interceptor | 22 | 22.9 | 22.9 | 52.1 |

| | | | | |
|----------|----|-------|-------|-------|
| Bayer | 1 | 1.0 | 1.0 | 53.1 |
| Olyset | 6 | 6.2 | 6.2 | 59.4 |
| Permanet | 38 | 39.6 | 39.6 | 99.0 |
| No tag | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q29 Was the bednet ever soaked or dipped in a liquid to repel mosquitoes or bugs?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | 2 | 1 | 1.0 | 100.0 | 100.0 |
| Missing | System | 95 | 99.0 | | |
| Total | | 96 | 100.0 | | |

Q30 How long ago was the bednet last soaked or dipped?

| | | Frequency | Percent |
|---------|--------|-----------|---------|
| Missing | System | 96 | 100.0 |

Q31 Who slept under a bednet last night?

Q31A No One

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q31B Child

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q31C Myself (Mother)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 27 | 28.1 | 28.1 | 28.1 |

| | | | | |
|-------|----|-------|-------|-------|
| Yes | 69 | 71.9 | 71.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q31D Husband/Partner

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 29 | 30.2 | 30.2 | 30.2 |
| Yes | 67 | 69.8 | 69.8 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q31E Other

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid | 70 | 72.9 | 72.9 | 72.9 |
| Other children | 26 | 27.1 | 27.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q32 May I weigh (name of child)?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid Yes | 96 | 100.0 | 100.0 | 100.0 |

Q32 Weight

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid 2.8 | 1 | 1.0 | 1.0 | 1.0 |
| 3.1 | 1 | 1.0 | 1.0 | 2.1 |
| 3.5 | 2 | 2.1 | 2.1 | 4.2 |
| 3.8 | 2 | 2.1 | 2.1 | 6.2 |
| 4.3 | 2 | 2.1 | 2.1 | 8.3 |
| 4.5 | 1 | 1.0 | 1.0 | 9.4 |
| 4.6 | 2 | 2.1 | 2.1 | 11.5 |

| | | | | |
|-----|---|-----|-----|------|
| 4.9 | 1 | 1.0 | 1.0 | 12.5 |
| 5 | 1 | 1.0 | 1.0 | 13.5 |
| 5.4 | 2 | 2.1 | 2.1 | 15.6 |
| 5.5 | 1 | 1.0 | 1.0 | 16.7 |
| 6 | 4 | 4.2 | 4.2 | 20.8 |
| 6.1 | 1 | 1.0 | 1.0 | 21.9 |
| 6.2 | 2 | 2.1 | 2.1 | 24.0 |
| 6.5 | 1 | 1.0 | 1.0 | 25.0 |
| 6.8 | 1 | 1.0 | 1.0 | 26.0 |
| 6.9 | 1 | 1.0 | 1.0 | 27.1 |
| 7.3 | 2 | 2.1 | 2.1 | 29.2 |
| 7.4 | 1 | 1.0 | 1.0 | 30.2 |
| 7.5 | 2 | 2.1 | 2.1 | 32.3 |
| 7.6 | 1 | 1.0 | 1.0 | 33.3 |
| 7.7 | 1 | 1.0 | 1.0 | 34.4 |
| 7.8 | 3 | 3.1 | 3.1 | 37.5 |
| 7.9 | 3 | 3.1 | 3.1 | 40.6 |
| 8 | 3 | 3.1 | 3.1 | 43.8 |
| 8.1 | 1 | 1.0 | 1.0 | 44.8 |
| 8.2 | 1 | 1.0 | 1.0 | 45.8 |
| 8.3 | 3 | 3.1 | 3.1 | 49.0 |
| 8.4 | 2 | 2.1 | 2.1 | 51.0 |
| 8.6 | 1 | 1.0 | 1.0 | 52.1 |
| 8.8 | 1 | 1.0 | 1.0 | 53.1 |
| 8.9 | 2 | 2.1 | 2.1 | 55.2 |
| 9 | 1 | 1.0 | 1.0 | 56.2 |
| 9.1 | 3 | 3.1 | 3.1 | 59.4 |
| 9.2 | 2 | 2.1 | 2.1 | 61.5 |
| 9.4 | 1 | 1.0 | 1.0 | 62.5 |
| 9.5 | 2 | 2.1 | 2.1 | 64.6 |

| | | | | |
|-------|----|-------|-------|-------|
| 9.6 | 1 | 1.0 | 1.0 | 65.6 |
| 9.7 | 1 | 1.0 | 1.0 | 66.7 |
| 9.8 | 1 | 1.0 | 1.0 | 67.7 |
| 9.9 | 1 | 1.0 | 1.0 | 68.8 |
| 10 | 6 | 6.2 | 6.2 | 75.0 |
| 10.2 | 2 | 2.1 | 2.1 | 77.1 |
| 10.4 | 2 | 2.1 | 2.1 | 79.2 |
| 10.5 | 3 | 3.1 | 3.1 | 82.3 |
| 10.8 | 1 | 1.0 | 1.0 | 83.3 |
| 10.9 | 1 | 1.0 | 1.0 | 84.4 |
| 11 | 3 | 3.1 | 3.1 | 87.5 |
| 11.2 | 3 | 3.1 | 3.1 | 90.6 |
| 11.4 | 1 | 1.0 | 1.0 | 91.7 |
| 11.5 | 4 | 4.2 | 4.2 | 95.8 |
| 11.6 | 1 | 1.0 | 1.0 | 96.9 |
| 12 | 1 | 1.0 | 1.0 | 97.9 |
| 12.4 | 1 | 1.0 | 1.0 | 99.0 |
| 13.5 | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q33 Child age in months

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 0 | 4 | 4.2 | 4.2 | 4.2 |
| | 1 | 5 | 5.2 | 5.2 | 9.4 |
| | 2 | 7 | 7.3 | 7.3 | 16.7 |
| | 3 | 5 | 5.2 | 5.2 | 21.9 |
| | 4 | 3 | 3.1 | 3.1 | 25.0 |
| | 5 | 4 | 4.2 | 4.2 | 29.2 |
| | 6 | 3 | 3.1 | 3.1 | 32.3 |

| | | | | |
|-------|----|-------|-------|-------|
| 7 | 8 | 8.3 | 8.3 | 40.6 |
| 8 | 1 | 1.0 | 1.0 | 41.7 |
| 9 | 7 | 7.3 | 7.3 | 49.0 |
| 10 | 6 | 6.2 | 6.2 | 55.2 |
| 11 | 3 | 3.1 | 3.1 | 58.3 |
| 12 | 3 | 3.1 | 3.1 | 61.5 |
| 13 | 4 | 4.2 | 4.2 | 65.6 |
| 14 | 5 | 5.2 | 5.2 | 70.8 |
| 15 | 2 | 2.1 | 2.1 | 72.9 |
| 16 | 7 | 7.3 | 7.3 | 80.2 |
| 17 | 1 | 1.0 | 1.0 | 81.2 |
| 18 | 2 | 2.1 | 2.1 | 83.3 |
| 19 | 4 | 4.2 | 4.2 | 87.5 |
| 21 | 1 | 1.0 | 1.0 | 88.5 |
| 22 | 6 | 6.2 | 6.2 | 94.8 |
| 23 | 5 | 5.2 | 5.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q34 Child Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 43 | 44.8 | 44.8 | 44.8 |
| Female | 53 | 55.2 | 55.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q35 Nutrition Status

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------------------|-----------|---------|---------------|--------------------|
| Valid Good nutrition Status (>-2SD) | 92 | 95.8 | 95.8 | 95.8 |
| Moderate Malnutrition (-2≤SD≤-3) | 4 | 4.2 | 4.2 | 100.0 |

Q35 Nutrition Status

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------------|-----------|---------|---------------|--------------------|
| Valid | Good nutrition Status (>-2SD) | 92 | 95.8 | 95.8 | 95.8 |
| | Moderate Malnutrition (-2≤SD≤-3) | 4 | 4.2 | 4.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

6-23 MONTHS

Commune

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Bukirasazi | 24 | 25.0 | 25.0 | 25.0 |
| | Buraza | 24 | 25.0 | 25.0 | 50.0 |
| | Itaba | 24 | 25.0 | 25.0 | 75.0 |
| | Makebuko | 24 | 25.0 | 25.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Age of the Mothers

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | 18 | 1 | 1.0 | 1.0 | 1.0 |
| | 20 | 3 | 3.1 | 3.1 | 4.2 |
| | 21 | 7 | 7.2 | 7.3 | 11.5 |
| | 22 | 2 | 2.1 | 2.1 | 13.5 |
| | 23 | 5 | 5.2 | 5.2 | 18.8 |
| | 24 | 7 | 7.2 | 7.3 | 26.0 |
| | 25 | 8 | 8.2 | 8.3 | 34.4 |
| | 26 | 5 | 5.2 | 5.2 | 39.6 |
| | 27 | 8 | 8.3 | 8.3 | 47.9 |

| | | | | |
|-------|----|-------|-------|-------|
| 28 | 4 | 4.2 | 4.2 | 52.1 |
| 29 | 4 | 4.2 | 4.2 | 56.2 |
| 30 | 15 | 15.6 | 15.6 | 71.9 |
| 31 | 2 | 2.1 | 2.1 | 74.0 |
| 32 | 9 | 9.4 | 9.4 | 83.3 |
| 33 | 1 | 1.0 | 1.0 | 84.4 |
| 35 | 4 | 4.2 | 4.2 | 88.5 |
| 36 | 3 | 3.1 | 3.1 | 91.7 |
| 37 | 2 | 2.1 | 2.1 | 93.8 |
| 38 | 2 | 2.1 | 2.1 | 95.8 |
| 40 | 2 | 2.1 | 2.1 | 97.9 |
| 41 | 1 | 1.0 | 1.0 | 99.0 |
| 43 | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Child Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 43 | 44.8 | 44.8 | 44.8 |
| Female | 53 | 55.2 | 55.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Age Of The Child

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Valid 6 | 9 | 9.4 | 9.4 | 9.4 |
| 7 | 11 | 11.5 | 11.5 | 20.8 |
| 8 | 7 | 7.3 | 7.3 | 28.1 |
| 9 | 12 | 12.5 | 12.5 | 40.6 |
| 10 | 6 | 6.2 | 6.2 | 46.9 |

| | | | | |
|-------|----|-------|-------|-------|
| 11 | 8 | 8.2 | 8.3 | 55.2 |
| 12 | 2 | 2.1 | 2.1 | 57.3 |
| 13 | 4 | 4.2 | 4.2 | 61.5 |
| 14 | 7 | 7.3 | 7.3 | 68.8 |
| 15 | 2 | 2.1 | 2.1 | 70.8 |
| 16 | 6 | 6.2 | 6.2 | 77.1 |
| 18 | 4 | 4.2 | 4.2 | 81.2 |
| 19 | 4 | 4.2 | 4.2 | 85.4 |
| 20 | 4 | 4.2 | 4.2 | 89.6 |
| 21 | 2 | 2.1 | 2.1 | 91.7 |
| 22 | 6 | 6.3 | 6.3 | 97.9 |
| 23 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q1 Have you ever attended school?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 11 | 11.5 | 11.5 | 11.5 |
| Yes | 85 | 88.5 | 88.5 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q2 What is the highest grade or level of school you have completed?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid Primary | 63 | 65.6 | 74.1 | 74.1 |
| Secondary | 5 | 5.2 | 5.9 | 80.0 |
| Other | 17 | 17.7 | 20.0 | 100.0 |
| Total | 85 | 88.5 | 100.0 | |
| Missing System | 11 | 11.5 | | |
| Total | 96 | 100.0 | | |

Q3 How many people live in your household?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 3 | 16 | 16.7 | 16.7 | 16.7 |
| | 4 | 19 | 19.8 | 19.8 | 36.5 |
| | 5 | 22 | 22.9 | 22.9 | 59.4 |
| | 6 | 21 | 21.9 | 21.9 | 81.2 |
| | 7 | 12 | 12.5 | 12.5 | 93.8 |
| | 8 | 3 | 3.1 | 3.1 | 96.9 |
| | 9 | 2 | 2.1 | 2.1 | 99.0 |
| | 10 | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4 Did (NAME) drink/eat:

Q4A Breast milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4B Plain water?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4C Cow Milk

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 90 | 93.8 | 93.8 | 93.8 |
| | Yes | 6 | 6.2 | 6.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4D Banana Juice

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 80 | 83.3 | 83.3 | 83.3 |
| | Yes | 16 | 16.7 | 16.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4E Commercially produced infant formula?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4F Any fortified, commercially available infant and young child food

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4G Any (other) porridge or gruel?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5. Did (NAME) drink/eat:

Q5A. Commercially produced infant formula?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 92 | 95.8 | 95.8 | 95.8 |

| | | | | |
|-----|---|-----|-----|------|
| Yes | 3 | 3.1 | 3.1 | 99.0 |
|-----|---|-----|-----|------|

Q5 E. Any other porridge?

| | | | | |
|------------|----|-------|-------|-------|
| Don't Know | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5B. Milk such as tinned, powdered, or fresh cow milk?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 94 | 97.9 | 97.9 | 97.9 |
| Yes | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5 D. Any fortified, commercially available infant and young child food (e.g. Cerelac)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 94 | 97.9 | 97.9 | 97.9 |
| Yes | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5 C. Yogurt or other milk products?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 2 | 2.1 | 2.1 | 99.0 |
| Don't know | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 25 | 26.0 | 26.0 | 26.0 |
| | Yes | 71 | 74.0 | 74.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 F. Bread, rice, maize or other foods made from grains (uburo, amasaka, ingano)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 G. White potatoes, white yams, cassava, or any other foods made from roots?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 16 | 16.7 | 16.7 | 16.7 |
| | Yes | 80 | 83.3 | 83.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 H. Squash, carrots or sweet potatoes that are yellow or orange inside?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 60 | 62.5 | 62.5 | 62.5 |
| | Yes | 36 | 37.5 | 37.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 I. Any dark green leafy vegetables (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 12 | 12.5 | 12.5 | 12.5 |
| | Yes | 84 | 87.5 | 87.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 J. Ripe mangoes, papayas or tomato?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 65 | 67.7 | 67.7 | 67.7 |
| | Yes | 31 | 32.3 | 32.3 | 100.0 |

Q5 F. Bread, rice, maize or other foods made from grains (uburo, amasaka, ingano)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 K. Foods made with red palm oil?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 6 | 6.2 | 6.2 | 6.2 |
| | Yes | 90 | 93.8 | 93.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 L. Any other fruits or vegetables like oranges, (ibicoco, intore), mushroom, pineapple, (amatunda), eggplant, avocado or banana?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 20 | 20.8 | 20.8 | 20.8 |
| | Yes | 76 | 79.2 | 79.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5MEggs

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 69 | 71.9 | 71.9 | 71.9 |
| | Yes | 27 | 28.1 | 28.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 N. Liver, kidney, heart or other organ meats?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 87 | 90.6 | 90.6 | 90.6 |
| | Yes | 9 | 9.4 | 9.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5O. Blood from cows (Ikiremve)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

Q5 L. Any other fruits or vegetables like oranges, (ibicoco, intore), mushroom, pineapple, (amatunda), eggplant, avocado or banana?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 20 | 20.8 | 20.8 | 20.8 |
| | Yes | 76 | 79.2 | 79.2 | 100.0 |
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 P. Any meat, such as beef, pork, goat, lamb, chicken, duck, rats, gopher, rabbit, dove or quail?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 80 | 83.3 | 83.3 | 83.3 |
| | Yes | 16 | 16.7 | 16.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 R. Fresh or dried fish?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 38 | 39.6 | 39.6 | 39.6 |
| | Yes | 58 | 60.4 | 60.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 S. Grubs, snails or insects (inswa, isenene, ubunyabobo, ibikenya, ibinyagu)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 T. Any foods made from beans, peas, nuts (inkore, soja) and lentils (intengwa)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 U. Any kinds of oils (ibiyoba, ibihoke, isoya), fats, butter, or foods made with any of these

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

Q5 Y. Any sugary foods, sweets, pastries, donut, biscuits, pop/soda, sugar cane, or honey?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 21 | 21.9 | 21.9 | 21.9 |
| | Yes | 75 | 78.1 | 78.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |
| Valid | No | 85 | 88.5 | 88.5 | 88.5 |
| | Yes | 11 | 11.5 | 11.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 V. Tea or coffee?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 84 | 87.5 | 87.5 | 87.5 |
| | Yes | 12 | 12.5 | 12.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 W. Any other liquids (such as banana juice)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | No | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

Q5 Z. Any other food not mentioned?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | 0 | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

#Food groups consumed

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|---|----|-------|-------|-------|
| Valid | 1 | 2 | 2.1 | 2.1 | 2.1 |
| | 3 | 13 | 13.5 | 13.5 | 15.6 |
| | 4 | 24 | 25.0 | 25.0 | 40.6 |
| | 5 | 31 | 32.3 | 32.3 | 72.9 |
| | 6 | 24 | 25.0 | 25.0 | 97.9 |
| | 7 | 2 | 2.1 | 2.1 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q6 How many times did (NAME) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 0 | 1 | 1.0 | 1.0 | 1.0 |
| | 2 | 6 | 6.2 | 6.2 | 7.3 |
| | 3 | 63 | 65.6 | 65.6 | 72.9 |
| | 4 | 23 | 24.0 | 24.0 | 96.9 |
| | 5 | 3 | 3.1 | 3.1 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q7 Has (NAME) ever received a vitamin A dose (like this/any of these)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q8 Did (NAME) receive a vitamin A dose within the last 6 months?i

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Yes | 87 | 90.6 | 98.9 | 98.9 |
| | No | 1 | 1.0 | 1.1 | 100.0 |
| | Total | 88 | 91.7 | 100.0 | |
| Missing | System | 8 | 8.3 | | |
| Total | | 96 | 100.0 | | |

Q9 Did you receive a card or child health booklet where (name of child's) vaccinations and Vitamin A doses can be written down? If so, can I see the card?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------------|-----------|---------|---------------|--------------------|
| Valid | | 8 | 8.3 | 8.3 | 8.3 |
| | Yes, interviewer sees the card | 75 | 78.1 | 78.1 | 86.5 |
| | Yes, but card is missing or lost | 7 | 7.3 | 7.3 | 93.8 |
| | No, never had a card | 6 | 6.2 | 6.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q10 Copy only information related to Vitamine A from the card or booklet

Q10 Vitamin A 1st dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | 2011-04-29 | 1 | 1.0 | 1.9 | 1.9 |
| | 2011-05-04 | 1 | 1.0 | 1.9 | 3.7 |
| | 2011-05-10 | 1 | 1.0 | 1.9 | 5.6 |
| | 2011-05-17 | 1 | 1.0 | 1.9 | 7.4 |
| | 2011-05-18 | 1 | 1.0 | 1.9 | 9.3 |
| | 2011-06-08 | 1 | 1.0 | 1.9 | 11.1 |
| | 2011-06-17 | 1 | 1.0 | 1.9 | 13.0 |
| | 2011-06-30 | 1 | 1.0 | 1.9 | 14.8 |
| | 2011-07-13 | 1 | 1.0 | 1.9 | 16.7 |
| | 2011-08-02 | 1 | 1.0 | 1.9 | 18.5 |
| | 2011-08-06 | 1 | 1.0 | 1.9 | 20.4 |

| | | | | |
|----------------|----|-------|-------|-------|
| 2011-08-17 | 4 | 4.2 | 7.4 | 27.8 |
| 2011-09-20 | 1 | 1.0 | 1.9 | 29.6 |
| 2011-09-30 | 1 | 1.0 | 1.9 | 31.5 |
| 2011-11-08 | 1 | 1.0 | 1.9 | 33.3 |
| 2011-11-25 | 1 | 1.0 | 1.9 | 35.2 |
| 2011-12-14 | 1 | 1.0 | 1.9 | 37.0 |
| 2012-01-04 | 1 | 1.0 | 1.9 | 38.9 |
| 2012-01-11 | 1 | 1.0 | 1.9 | 40.7 |
| 2012-01-23 | 1 | 1.0 | 1.9 | 42.6 |
| 2012-01-27 | 1 | 1.0 | 1.9 | 44.4 |
| 2012-02-29 | 1 | 1.0 | 1.9 | 46.3 |
| 2012-03-02 | 1 | 1.0 | 1.9 | 48.1 |
| 2012-03-06 | 1 | 1.0 | 1.9 | 50.0 |
| 2012-05-11 | 1 | 1.0 | 1.9 | 51.9 |
| 2012-06-18 | 9 | 9.4 | 16.7 | 68.5 |
| 2012-06-19 | 5 | 5.2 | 9.3 | 77.8 |
| 2012-06-20 | 8 | 8.3 | 14.8 | 92.6 |
| 2012-06-21 | 2 | 2.1 | 3.7 | 96.3 |
| 2012-07-06 | 1 | 1.0 | 1.9 | 98.1 |
| 2012-12-19 | 1 | 1.0 | 1.9 | 100.0 |
| Total | 54 | 56.2 | 100.0 | |
| Missing System | 42 | 43.8 | | |
| Total | 96 | 100.0 | | |

Q10 Vitamin A 2nd dose

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid 2011-06-18 | 1 | 1.0 | 7.1 | 7.1 |
| 2012-06-18 | 2 | 2.1 | 14.3 | 21.4 |
| 2012-06-19 | 3 | 3.1 | 21.4 | 42.9 |

| | | | | | |
|---------|------------|----|-------|-------|-------|
| | 2012-06-20 | 7 | 7.3 | 50.0 | 92.9 |
| | 2012-06-22 | 1 | 1.0 | 7.1 | 100.0 |
| | Total | 14 | 14.6 | 100.0 | |
| Missing | System | 82 | 85.4 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 3rd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2012-06-19 | 1 | 1.0 | 50.0 | 50.0 |
| | 2012-06-21 | 1 | 1.0 | 50.0 | 100.0 |
| | Total | 2 | 2.1 | 100.0 | |
| Missing | System | 94 | 97.9 | | |
| Total | | 96 | 100.0 | | |

12-23 MONTHS

Commune

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Bukirasazi | 24 | 25.0 | 25.0 | 25.0 |
| | Buraza | 24 | 25.0 | 25.0 | 50.0 |
| | Itaba | 24 | 25.0 | 25.0 | 75.0 |
| | Makebuko | 24 | 25.0 | 25.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Age of the Mothers

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | 18 | 1 | 1.0 | 1.0 | 1.0 |
| | 20 | 3 | 3.1 | 3.1 | 4.2 |
| | 21 | 7 | 7.2 | 7.3 | 11.5 |

| | | | | |
|-------|----|-------|-------|-------|
| 22 | 2 | 2.1 | 2.1 | 13.5 |
| 23 | 5 | 5.2 | 5.2 | 18.8 |
| 24 | 7 | 7.2 | 7.3 | 26.0 |
| 25 | 8 | 8.2 | 8.3 | 34.4 |
| 26 | 5 | 5.2 | 5.2 | 39.6 |
| 27 | 8 | 8.3 | 8.3 | 47.9 |
| 28 | 4 | 4.2 | 4.2 | 52.1 |
| 29 | 4 | 4.2 | 4.2 | 56.2 |
| 30 | 15 | 15.6 | 15.6 | 71.9 |
| 31 | 2 | 2.1 | 2.1 | 74.0 |
| 32 | 9 | 9.4 | 9.4 | 83.3 |
| 33 | 1 | 1.0 | 1.0 | 84.4 |
| 35 | 4 | 4.2 | 4.2 | 88.5 |
| 36 | 3 | 3.1 | 3.1 | 91.7 |
| 37 | 2 | 2.1 | 2.1 | 93.8 |
| 38 | 2 | 2.1 | 2.1 | 95.8 |
| 40 | 2 | 2.1 | 2.1 | 97.9 |
| 41 | 1 | 1.0 | 1.0 | 99.0 |
| 43 | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Child Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 43 | 44.8 | 44.8 | 44.8 |
| Female | 53 | 55.2 | 55.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Age Of The Child

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 6 | 9 | 9.4 | 9.4 | 9.4 |
| | 7 | 11 | 11.5 | 11.5 | 20.8 |
| | 8 | 7 | 7.3 | 7.3 | 28.1 |
| | 9 | 12 | 12.5 | 12.5 | 40.6 |
| | 10 | 6 | 6.2 | 6.2 | 46.9 |
| | 11 | 8 | 8.2 | 8.3 | 55.2 |
| | 12 | 2 | 2.1 | 2.1 | 57.3 |
| | 13 | 4 | 4.2 | 4.2 | 61.5 |
| | 14 | 7 | 7.3 | 7.3 | 68.8 |
| | 15 | 2 | 2.1 | 2.1 | 70.8 |
| | 16 | 6 | 6.2 | 6.2 | 77.1 |
| | 18 | 4 | 4.2 | 4.2 | 81.2 |
| | 19 | 4 | 4.2 | 4.2 | 85.4 |
| | 20 | 4 | 4.2 | 4.2 | 89.6 |
| | 21 | 2 | 2.1 | 2.1 | 91.7 |
| | 22 | 6 | 6.3 | 6.3 | 97.9 |
| | 23 | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q1 Have you ever attended school?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 11 | 11.5 | 11.5 | 11.5 |
| | Yes | 85 | 88.5 | 88.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q2 What is the highest grade or level of school you have completed?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------|-----------|---------|---------------|--------------------|
| Valid | Primary | 63 | 65.6 | 74.1 | 74.1 |

| | | | | | |
|---------|-----------|----|-------|-------|-------|
| | Secondary | 5 | 5.2 | 5.9 | 80.0 |
| | Other | 17 | 17.7 | 20.0 | 100.0 |
| | Total | 85 | 88.5 | 100.0 | |
| Missing | System | 11 | 11.5 | | |
| Total | | 96 | 100.0 | | |

Q3 How many people live in your household?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 3 | 16 | 16.7 | 16.7 | 16.7 |
| | 4 | 19 | 19.8 | 19.8 | 36.5 |
| | 5 | 22 | 22.9 | 22.9 | 59.4 |
| | 6 | 21 | 21.9 | 21.9 | 81.2 |
| | 7 | 12 | 12.5 | 12.5 | 93.8 |
| | 8 | 3 | 3.1 | 3.1 | 96.9 |
| | 9 | 2 | 2.1 | 2.1 | 99.0 |
| | 10 | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4 Did (NAME) drink/eat:

Q4A Breast milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4B Plain water?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4C Cow Milk

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 90 | 93.8 | 93.8 | 93.8 |
| | Yes | 6 | 6.2 | 6.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4D Banana Juice

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 80 | 83.3 | 83.3 | 83.3 |
| | Yes | 16 | 16.7 | 16.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4E Commercially produced infant formula?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4F Any fortified, commercially available infant and young child food

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4G Any (other) porridge or gruel?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |

| | | | | |
|-------|----|-------|-------|-------|
| Yes | 70 | 72.9 | 72.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5. Did (NAME) drink/eat:

Q5A. Commercially produced infant formula?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid No | 92 | 95.8 | 95.8 | 95.8 |
| Yes | 3 | 3.1 | 3.1 | 99.0 |
| Don't Know | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5B. Milk such as tinned, powdered, or fresh cow milk?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 94 | 97.9 | 97.9 | 97.9 |
| Yes | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5 C. Yogurt or other milk products?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 2 | 2.1 | 2.1 | 99.0 |
| Don't know | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5 D. Any fortified, commercially available infant and young child food (e.g. Cerelac)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 94 | 97.9 | 97.9 | 97.9 |
| Yes | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5 E. Any other porridge?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 25 | 26.0 | 26.0 | 26.0 |
| | Yes | 71 | 74.0 | 74.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 F. Bread, rice, maize or other foods made from grains (uburo, amasaka, ingano)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 G. White potatoes, white yams, cassava, or any other foods made from roots?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 16 | 16.7 | 16.7 | 16.7 |
| | Yes | 80 | 83.3 | 83.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 H. Squash, carrots or sweet potatoes that are yellow or orange inside?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 60 | 62.5 | 62.5 | 62.5 |
| | Yes | 36 | 37.5 | 37.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 I. Any dark green leafy vegetables (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 12 | 12.5 | 12.5 | 12.5 |
| | Yes | 84 | 87.5 | 87.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 J. Ripe mangoes, papayas or tomato?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|-------|----|-------|-------|-------|
| Valid | No | 65 | 67.7 | 67.7 | 67.7 |
| | Yes | 31 | 32.3 | 32.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 K. Foods made with red palm oil?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 6 | 6.2 | 6.2 | 6.2 |
| | Yes | 90 | 93.8 | 93.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 L. Any other fruits or vegetables like oranges, (ibicoco, intore), mushroom, pineapple, (amatunda), eggplant, avocado or banana?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 20 | 20.8 | 20.8 | 20.8 |
| | Yes | 76 | 79.2 | 79.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5MEggs

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 69 | 71.9 | 71.9 | 71.9 |
| | Yes | 27 | 28.1 | 28.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 N. Liver, kidney, heart or other organ meats?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 87 | 90.6 | 90.6 | 90.6 |
| | Yes | 9 | 9.4 | 9.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5O. Blood from cows (Ikiremve)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 P. Any meat, such as beef, pork, goat, lamb, chicken, duck, rats, gopher, rabbit, dove or quail?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 80 | 83.3 | 83.3 | 83.3 |
| | Yes | 16 | 16.7 | 16.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 R. Fresh or dried fish?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 38 | 39.6 | 39.6 | 39.6 |
| | Yes | 58 | 60.4 | 60.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 S. Grubs, snails or insects (inswa, isenene, ubunyabobo, ibikenya, ibinyagu)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 T. Any foods made from beans, peas, nuts (inkore, soja) and lentils (intengwa)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 U. Any kinds of oils (ibiyoba, ibihoke, isoya), fats, butter, or foods made with any of these

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 85 | 88.5 | 88.5 | 88.5 |
| | Yes | 11 | 11.5 | 11.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 V. Tea or coffee?

Q5 Y. Any sugary foods, sweets, pastries, donut, biscuits, pop/soda, sugar cane, or honey?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 21 | 21.9 | 21.9 | 21.9 |
| | Yes | 75 | 78.1 | 78.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 84 | 87.5 | 87.5 | 87.5 |
| | Yes | 12 | 12.5 | 12.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 W. Any other liquids (such as banana juice)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | No | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

Q5 Z. Any other food not mentioned?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | 0 | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

#Food groups consumed

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 1 | 2 | 2.1 | 2.1 | 2.1 |
| | 3 | 13 | 13.5 | 13.5 | 15.6 |
| | 4 | 24 | 25.0 | 25.0 | 40.6 |
| | 5 | 31 | 32.3 | 32.3 | 72.9 |
| | 6 | 24 | 25.0 | 25.0 | 97.9 |
| | | | | | |

| | | | | |
|-------|----|-------|-------|-------|
| 7 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6 How many times did (NAME) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 1 | 1.0 | 1.0 | 1.0 |
| | 2 | 6 | 6.2 | 6.2 | 7.3 |
| | 3 | 63 | 65.6 | 65.6 | 72.9 |
| | 4 | 23 | 24.0 | 24.0 | 96.9 |
| | 5 | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q7 Has (NAME) ever received a vitamin A dose (like this/any of these)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q8 Did (NAME) receive a vitamin A dose within the last 6 months?i

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Yes | 87 | 90.6 | 98.9 | 98.9 |
| | No | 1 | 1.0 | 1.1 | 100.0 |
| | Total | 88 | 91.7 | 100.0 | |
| Missing | System | 8 | 8.3 | | |
| Total | | 96 | 100.0 | | |

Q9 Did you receive a card or child health booklet where (name of child's) vaccinations and Vitamin A doses can be written down? If so, can I see the card?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------------------|-----------|---------|---------------|--------------------|
| Valid | 8 | 8.3 | 8.3 | 8.3 |
| Yes, interviewer sees the card | 75 | 78.1 | 78.1 | 86.5 |
| Yes, but card is missing or lost | 7 | 7.3 | 7.3 | 93.8 |
| No, never had a card | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q10 Copy only information related to Vitamine A from the card or booklet

Q10 Vitamin A 1st dose

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid 2011-04-29 | 1 | 1.0 | 1.9 | 1.9 |
| 2011-05-04 | 1 | 1.0 | 1.9 | 3.7 |
| 2011-05-10 | 1 | 1.0 | 1.9 | 5.6 |
| 2011-05-17 | 1 | 1.0 | 1.9 | 7.4 |
| 2011-05-18 | 1 | 1.0 | 1.9 | 9.3 |
| 2011-06-08 | 1 | 1.0 | 1.9 | 11.1 |
| 2011-06-17 | 1 | 1.0 | 1.9 | 13.0 |
| 2011-06-30 | 1 | 1.0 | 1.9 | 14.8 |
| 2011-07-13 | 1 | 1.0 | 1.9 | 16.7 |
| 2011-08-02 | 1 | 1.0 | 1.9 | 18.5 |
| 2011-08-06 | 1 | 1.0 | 1.9 | 20.4 |
| 2011-08-17 | 4 | 4.2 | 7.4 | 27.8 |
| 2011-09-20 | 1 | 1.0 | 1.9 | 29.6 |
| 2011-09-30 | 1 | 1.0 | 1.9 | 31.5 |
| 2011-11-08 | 1 | 1.0 | 1.9 | 33.3 |
| 2011-11-25 | 1 | 1.0 | 1.9 | 35.2 |
| 2011-12-14 | 1 | 1.0 | 1.9 | 37.0 |

| | | | | | |
|---------|------------|----|-------|-------|-------|
| | 2012-01-04 | 1 | 1.0 | 1.9 | 38.9 |
| | 2012-01-11 | 1 | 1.0 | 1.9 | 40.7 |
| | 2012-01-23 | 1 | 1.0 | 1.9 | 42.6 |
| | 2012-01-27 | 1 | 1.0 | 1.9 | 44.4 |
| | 2012-02-29 | 1 | 1.0 | 1.9 | 46.3 |
| | 2012-03-02 | 1 | 1.0 | 1.9 | 48.1 |
| | 2012-03-06 | 1 | 1.0 | 1.9 | 50.0 |
| | 2012-05-11 | 1 | 1.0 | 1.9 | 51.9 |
| | 2012-06-18 | 9 | 9.4 | 16.7 | 68.5 |
| | 2012-06-19 | 5 | 5.2 | 9.3 | 77.8 |
| | 2012-06-20 | 8 | 8.3 | 14.8 | 92.6 |
| | 2012-06-21 | 2 | 2.1 | 3.7 | 96.3 |
| | 2012-07-06 | 1 | 1.0 | 1.9 | 98.1 |
| | 2012-12-19 | 1 | 1.0 | 1.9 | 100.0 |
| | Total | 54 | 56.2 | 100.0 | |
| Missing | System | 42 | 43.8 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 2nd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2011-06-18 | 1 | 1.0 | 7.1 | 7.1 |
| | 2012-06-18 | 2 | 2.1 | 14.3 | 21.4 |
| | 2012-06-19 | 3 | 3.1 | 21.4 | 42.9 |
| | 2012-06-20 | 7 | 7.3 | 50.0 | 92.9 |
| | 2012-06-22 | 1 | 1.0 | 7.1 | 100.0 |
| | Total | 14 | 14.6 | 100.0 | |
| Missing | System | 82 | 85.4 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 3rd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2012-06-19 | 1 | 1.0 | 50.0 | 50.0 |
| | 2012-06-21 | 1 | 1.0 | 50.0 | 100.0 |
| | Total | 2 | 2.1 | 100.0 | |
| Missing | System | 94 | 97.9 | | |
| Total | | 96 | 100.0 | | |

DIARRHEA

Commune

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Bukirasazi | 24 | 25.0 | 25.0 | 25.0 |
| | Buraza | 24 | 25.0 | 25.0 | 50.0 |
| | Itaba | 24 | 25.0 | 25.0 | 75.0 |
| | Makebuko | 24 | 25.0 | 25.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Age of the Mothers

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | 18 | 1 | 1.0 | 1.0 | 1.0 |
| | 20 | 3 | 3.1 | 3.1 | 4.2 |
| | 21 | 7 | 7.2 | 7.3 | 11.5 |
| | 22 | 2 | 2.1 | 2.1 | 13.5 |
| | 23 | 5 | 5.2 | 5.2 | 18.8 |
| | 24 | 7 | 7.2 | 7.3 | 26.0 |
| | 25 | 8 | 8.2 | 8.3 | 34.4 |
| | 26 | 5 | 5.2 | 5.2 | 39.6 |

| | | | | |
|-------|----|-------|-------|-------|
| 27 | 8 | 8.3 | 8.3 | 47.9 |
| 28 | 4 | 4.2 | 4.2 | 52.1 |
| 29 | 4 | 4.2 | 4.2 | 56.2 |
| 30 | 15 | 15.6 | 15.6 | 71.9 |
| 31 | 2 | 2.1 | 2.1 | 74.0 |
| 32 | 9 | 9.4 | 9.4 | 83.3 |
| 33 | 1 | 1.0 | 1.0 | 84.4 |
| 35 | 4 | 4.2 | 4.2 | 88.5 |
| 36 | 3 | 3.1 | 3.1 | 91.7 |
| 37 | 2 | 2.1 | 2.1 | 93.8 |
| 38 | 2 | 2.1 | 2.1 | 95.8 |
| 40 | 2 | 2.1 | 2.1 | 97.9 |
| 41 | 1 | 1.0 | 1.0 | 99.0 |
| 43 | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Child Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 43 | 44.8 | 44.8 | 44.8 |
| Female | 53 | 55.2 | 55.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Age Of The Child

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Valid 6 | 9 | 9.4 | 9.4 | 9.4 |
| 7 | 11 | 11.5 | 11.5 | 20.8 |
| 8 | 7 | 7.3 | 7.3 | 28.1 |
| 9 | 12 | 12.5 | 12.5 | 40.6 |

| | | | | |
|-------|----|-------|-------|-------|
| 10 | 6 | 6.2 | 6.2 | 46.9 |
| 11 | 8 | 8.2 | 8.3 | 55.2 |
| 12 | 2 | 2.1 | 2.1 | 57.3 |
| 13 | 4 | 4.2 | 4.2 | 61.5 |
| 14 | 7 | 7.3 | 7.3 | 68.8 |
| 15 | 2 | 2.1 | 2.1 | 70.8 |
| 16 | 6 | 6.2 | 6.2 | 77.1 |
| 18 | 4 | 4.2 | 4.2 | 81.2 |
| 19 | 4 | 4.2 | 4.2 | 85.4 |
| 20 | 4 | 4.2 | 4.2 | 89.6 |
| 21 | 2 | 2.1 | 2.1 | 91.7 |
| 22 | 6 | 6.3 | 6.3 | 97.9 |
| 23 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q1 Have you ever attended school?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 11 | 11.5 | 11.5 | 11.5 |
| Yes | 85 | 88.5 | 88.5 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q2 What is the highest grade or level of school you have completed?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid Primary | 63 | 65.6 | 74.1 | 74.1 |
| Secondary | 5 | 5.2 | 5.9 | 80.0 |
| Other | 17 | 17.7 | 20.0 | 100.0 |
| Total | 85 | 88.5 | 100.0 | |
| Missing System | 11 | 11.5 | | |
| Total | 96 | 100.0 | | |

Q3 How many people live in your household?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 3 | 16 | 16.7 | 16.7 | 16.7 |
| | 4 | 19 | 19.8 | 19.8 | 36.5 |
| | 5 | 22 | 22.9 | 22.9 | 59.4 |
| | 6 | 21 | 21.9 | 21.9 | 81.2 |
| | 7 | 12 | 12.5 | 12.5 | 93.8 |
| | 8 | 3 | 3.1 | 3.1 | 96.9 |
| | 9 | 2 | 2.1 | 2.1 | 99.0 |
| | 10 | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4 Did (NAME) drink/eat:

Q4A Breast milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q4B Plain water?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q4C Cow Milk

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 90 | 93.8 | 93.8 | 93.8 |
| Yes | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4D Banana Juice

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 80 | 83.3 | 83.3 | 83.3 |
| Yes | 16 | 16.7 | 16.7 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4E Commercially produced infant formula?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 3 | 3.1 | 3.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4F Any fortified, commercially available infant and young child food

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 3 | 3.1 | 3.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4G Any (other) porridge or gruel?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 26 | 27.1 | 27.1 | 27.1 |
| Yes | 70 | 72.9 | 72.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5. Did (NAME) drink/eat:

Q5A. Commercially produced infant formula?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | No | 92 | 95.8 | 95.8 | 95.8 |
| | Yes | 3 | 3.1 | 3.1 | 99.0 |
| | Don't Know | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5B. Milk such as tinned, powdered, or fresh cow milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 94 | 97.9 | 97.9 | 97.9 |
| | Yes | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 C. Yogurt or other milk products?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 2 | 2.1 | 2.1 | 99.0 |
| | Don't know | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 D. Any fortified, commercially available infant and young child food (e.g. Cerelac)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 94 | 97.9 | 97.9 | 97.9 |
| | Yes | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 E. Any other porridge?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 25 | 26.0 | 26.0 | 26.0 |
| | Yes | 71 | 74.0 | 74.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 F. Bread, rice, maize or other foods made from grains (uburo, amasaka, ingano)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 G. White potatoes, white yams, cassava, or any other foods made from roots?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 16 | 16.7 | 16.7 | 16.7 |
| | Yes | 80 | 83.3 | 83.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 H. Squash, carrots or sweet potatoes that are yellow or orange inside?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 60 | 62.5 | 62.5 | 62.5 |
| | Yes | 36 | 37.5 | 37.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 I. Any dark green leafy vegetables (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 12 | 12.5 | 12.5 | 12.5 |
| | Yes | 84 | 87.5 | 87.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 J. Ripe mangoes, papayas or tomato?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|-------|----|-------|-------|-------|
| Valid | No | 65 | 67.7 | 67.7 | 67.7 |
| | Yes | 31 | 32.3 | 32.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 K. Foods made with red palm oil?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 6 | 6.2 | 6.2 | 6.2 |
| | Yes | 90 | 93.8 | 93.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 L. Any other fruits or vegetables like oranges, (ibicoco, intore), mushroom, pineapple, (amatunda), eggplant, avocado or banana?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 20 | 20.8 | 20.8 | 20.8 |
| | Yes | 76 | 79.2 | 79.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5MEggs

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 69 | 71.9 | 71.9 | 71.9 |
| | Yes | 27 | 28.1 | 28.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 N. Liver, kidney, heart or other organ meats?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 87 | 90.6 | 90.6 | 90.6 |
| | Yes | 9 | 9.4 | 9.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5O. Blood from cows (Ikiremve)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 P. Any meat, such as beef, pork, goat, lamb, chicken, duck, rats, gopher, rabbit, dove or quail?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 80 | 83.3 | 83.3 | 83.3 |
| | Yes | 16 | 16.7 | 16.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 R. Fresh or dried fish?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 38 | 39.6 | 39.6 | 39.6 |
| | Yes | 58 | 60.4 | 60.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 S. Grubs, snails or insects (inswa, isenene, ubunyabobo, ibikenya, ibinyagu)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 T. Any foods made from beans, peas, nuts (inkore, soja) and lentils (intengwa)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 U. Any kinds of oils (ibiyoba, ibihoke, isoya), fats, butter, or foods made with any of these

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 85 | 88.5 | 88.5 | 88.5 |
| | Yes | 11 | 11.5 | 11.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 V. Tea or coffee?

Q5 Y. Any sugary foods, sweets, pastries, donut, biscuits, pop/soda, sugar cane, or honey?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 21 | 21.9 | 21.9 | 21.9 |
| | Yes | 75 | 78.1 | 78.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | No | 84 | 87.5 | 87.5 | 87.5 |
| | Yes | 12 | 12.5 | 12.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 W. Any other liquids (such as banana juice)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | No | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

Q5 Z. Any other food not mentioned?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | 0 | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

#Food groups consumed

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 1 | 2 | 2.1 | 2.1 | 2.1 |
| | 3 | 13 | 13.5 | 13.5 | 15.6 |
| | 4 | 24 | 25.0 | 25.0 | 40.6 |
| | 5 | 31 | 32.3 | 32.3 | 72.9 |
| | 6 | 24 | 25.0 | 25.0 | 97.9 |
| | | | | | |

| | | | | |
|-------|----|-------|-------|-------|
| 7 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6 How many times did (NAME) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 1 | 1.0 | 1.0 | 1.0 |
| | 2 | 6 | 6.2 | 6.2 | 7.3 |
| | 3 | 63 | 65.6 | 65.6 | 72.9 |
| | 4 | 23 | 24.0 | 24.0 | 96.9 |
| | 5 | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q7 Has (NAME) ever received a vitamin A dose (like this/any of these)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q8 Did (NAME) receive a vitamin A dose within the last 6 months?i

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Yes | 87 | 90.6 | 98.9 | 98.9 |
| | No | 1 | 1.0 | 1.1 | 100.0 |
| | Total | 88 | 91.7 | 100.0 | |
| Missing | System | 8 | 8.3 | | |
| Total | | 96 | 100.0 | | |

Q9 Did you receive a card or child health booklet where (name of child's) vaccinations and Vitamin A doses can be written down? If so, can I see the card?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------------------|-----------|---------|---------------|--------------------|
| Valid | 8 | 8.3 | 8.3 | 8.3 |
| Yes, interviewer sees the card | 75 | 78.1 | 78.1 | 86.5 |
| Yes, but card is missing or lost | 7 | 7.3 | 7.3 | 93.8 |
| No, never had a card | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q10 Copy only information related to Vitamine A from the card or booklet

Q10 Vitamin A 1st dose

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid 2011-04-29 | 1 | 1.0 | 1.9 | 1.9 |
| 2011-05-04 | 1 | 1.0 | 1.9 | 3.7 |
| 2011-05-10 | 1 | 1.0 | 1.9 | 5.6 |
| 2011-05-17 | 1 | 1.0 | 1.9 | 7.4 |
| 2011-05-18 | 1 | 1.0 | 1.9 | 9.3 |
| 2011-06-08 | 1 | 1.0 | 1.9 | 11.1 |
| 2011-06-17 | 1 | 1.0 | 1.9 | 13.0 |
| 2011-06-30 | 1 | 1.0 | 1.9 | 14.8 |
| 2011-07-13 | 1 | 1.0 | 1.9 | 16.7 |
| 2011-08-02 | 1 | 1.0 | 1.9 | 18.5 |
| 2011-08-06 | 1 | 1.0 | 1.9 | 20.4 |
| 2011-08-17 | 4 | 4.2 | 7.4 | 27.8 |
| 2011-09-20 | 1 | 1.0 | 1.9 | 29.6 |
| 2011-09-30 | 1 | 1.0 | 1.9 | 31.5 |
| 2011-11-08 | 1 | 1.0 | 1.9 | 33.3 |
| 2011-11-25 | 1 | 1.0 | 1.9 | 35.2 |
| 2011-12-14 | 1 | 1.0 | 1.9 | 37.0 |

| | | | | | |
|---------|------------|----|-------|-------|-------|
| | 2012-01-04 | 1 | 1.0 | 1.9 | 38.9 |
| | 2012-01-11 | 1 | 1.0 | 1.9 | 40.7 |
| | 2012-01-23 | 1 | 1.0 | 1.9 | 42.6 |
| | 2012-01-27 | 1 | 1.0 | 1.9 | 44.4 |
| | 2012-02-29 | 1 | 1.0 | 1.9 | 46.3 |
| | 2012-03-02 | 1 | 1.0 | 1.9 | 48.1 |
| | 2012-03-06 | 1 | 1.0 | 1.9 | 50.0 |
| | 2012-05-11 | 1 | 1.0 | 1.9 | 51.9 |
| | 2012-06-18 | 9 | 9.4 | 16.7 | 68.5 |
| | 2012-06-19 | 5 | 5.2 | 9.3 | 77.8 |
| | 2012-06-20 | 8 | 8.3 | 14.8 | 92.6 |
| | 2012-06-21 | 2 | 2.1 | 3.7 | 96.3 |
| | 2012-07-06 | 1 | 1.0 | 1.9 | 98.1 |
| | 2012-12-19 | 1 | 1.0 | 1.9 | 100.0 |
| | Total | 54 | 56.2 | 100.0 | |
| Missing | System | 42 | 43.8 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 2nd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2011-06-18 | 1 | 1.0 | 7.1 | 7.1 |
| | 2012-06-18 | 2 | 2.1 | 14.3 | 21.4 |
| | 2012-06-19 | 3 | 3.1 | 21.4 | 42.9 |
| | 2012-06-20 | 7 | 7.3 | 50.0 | 92.9 |
| | 2012-06-22 | 1 | 1.0 | 7.1 | 100.0 |
| | Total | 14 | 14.6 | 100.0 | |
| Missing | System | 82 | 85.4 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 3rd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2012-06-19 | 1 | 1.0 | 50.0 | 50.0 |
| | 2012-06-21 | 1 | 1.0 | 50.0 | 100.0 |
| | Total | 2 | 2.1 | 100.0 | |
| Missing | System | 94 | 97.9 | | |
| Total | | 96 | 100.0 | | |

PNEUMONIA

Commune

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Bukirasazi | 24 | 25.0 | 25.0 | 25.0 |
| | Buraza | 24 | 25.0 | 25.0 | 50.0 |
| | Itaba | 24 | 25.0 | 25.0 | 75.0 |
| | Makebuko | 24 | 25.0 | 25.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Age of the Mothers

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | 18 | 1 | 1.0 | 1.0 | 1.0 |
| | 20 | 3 | 3.1 | 3.1 | 4.2 |
| | 21 | 7 | 7.2 | 7.3 | 11.5 |
| | 22 | 2 | 2.1 | 2.1 | 13.5 |
| | 23 | 5 | 5.2 | 5.2 | 18.8 |
| | 24 | 7 | 7.2 | 7.3 | 26.0 |
| | 25 | 8 | 8.2 | 8.3 | 34.4 |
| | 26 | 5 | 5.2 | 5.2 | 39.6 |

| | | | | |
|-------|----|-------|-------|-------|
| 27 | 8 | 8.3 | 8.3 | 47.9 |
| 28 | 4 | 4.2 | 4.2 | 52.1 |
| 29 | 4 | 4.2 | 4.2 | 56.2 |
| 30 | 15 | 15.6 | 15.6 | 71.9 |
| 31 | 2 | 2.1 | 2.1 | 74.0 |
| 32 | 9 | 9.4 | 9.4 | 83.3 |
| 33 | 1 | 1.0 | 1.0 | 84.4 |
| 35 | 4 | 4.2 | 4.2 | 88.5 |
| 36 | 3 | 3.1 | 3.1 | 91.7 |
| 37 | 2 | 2.1 | 2.1 | 93.8 |
| 38 | 2 | 2.1 | 2.1 | 95.8 |
| 40 | 2 | 2.1 | 2.1 | 97.9 |
| 41 | 1 | 1.0 | 1.0 | 99.0 |
| 43 | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Child Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 43 | 44.8 | 44.8 | 44.8 |
| Female | 53 | 55.2 | 55.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Age Of The Child

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Valid 6 | 9 | 9.4 | 9.4 | 9.4 |
| 7 | 11 | 11.5 | 11.5 | 20.8 |
| 8 | 7 | 7.3 | 7.3 | 28.1 |
| 9 | 12 | 12.5 | 12.5 | 40.6 |

| | | | | |
|-------|----|-------|-------|-------|
| 10 | 6 | 6.2 | 6.2 | 46.9 |
| 11 | 8 | 8.2 | 8.3 | 55.2 |
| 12 | 2 | 2.1 | 2.1 | 57.3 |
| 13 | 4 | 4.2 | 4.2 | 61.5 |
| 14 | 7 | 7.3 | 7.3 | 68.8 |
| 15 | 2 | 2.1 | 2.1 | 70.8 |
| 16 | 6 | 6.2 | 6.2 | 77.1 |
| 18 | 4 | 4.2 | 4.2 | 81.2 |
| 19 | 4 | 4.2 | 4.2 | 85.4 |
| 20 | 4 | 4.2 | 4.2 | 89.6 |
| 21 | 2 | 2.1 | 2.1 | 91.7 |
| 22 | 6 | 6.3 | 6.3 | 97.9 |
| 23 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q1 Have you ever attended school?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 11 | 11.5 | 11.5 | 11.5 |
| Yes | 85 | 88.5 | 88.5 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q2 What is the highest grade or level of school you have completed?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid Primary | 63 | 65.6 | 74.1 | 74.1 |
| Secondary | 5 | 5.2 | 5.9 | 80.0 |
| Other | 17 | 17.7 | 20.0 | 100.0 |
| Total | 85 | 88.5 | 100.0 | |
| Missing System | 11 | 11.5 | | |
| Total | 96 | 100.0 | | |

Q3 How many people live in your household?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 3 | 16 | 16.7 | 16.7 | 16.7 |
| | 4 | 19 | 19.8 | 19.8 | 36.5 |
| | 5 | 22 | 22.9 | 22.9 | 59.4 |
| | 6 | 21 | 21.9 | 21.9 | 81.2 |
| | 7 | 12 | 12.5 | 12.5 | 93.8 |
| | 8 | 3 | 3.1 | 3.1 | 96.9 |
| | 9 | 2 | 2.1 | 2.1 | 99.0 |
| | 10 | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4 Did (NAME) drink/eat:

Q4A Breast milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q4B Plain water?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q4C Cow Milk

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 90 | 93.8 | 93.8 | 93.8 |
| Yes | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4D Banana Juice

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 80 | 83.3 | 83.3 | 83.3 |
| Yes | 16 | 16.7 | 16.7 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4E Commercially produced infant formula?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 3 | 3.1 | 3.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4F Any fortified, commercially available infant and young child food

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 3 | 3.1 | 3.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4G Any (other) porridge or gruel?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 26 | 27.1 | 27.1 | 27.1 |
| Yes | 70 | 72.9 | 72.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5. Did (NAME) drink/eat:

Q5A. Commercially produced infant formula?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | No | 92 | 95.8 | 95.8 | 95.8 |
| | Yes | 3 | 3.1 | 3.1 | 99.0 |
| | Don't Know | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5B. Milk such as tinned, powdered, or fresh cow milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 94 | 97.9 | 97.9 | 97.9 |
| | Yes | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 C. Yogurt or other milk products?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 2 | 2.1 | 2.1 | 99.0 |
| | Don't know | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 D. Any fortified, commercially available infant and young child food (e.g. Cerelac)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 94 | 97.9 | 97.9 | 97.9 |
| | Yes | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 E. Any other porridge?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 25 | 26.0 | 26.0 | 26.0 |
| | Yes | 71 | 74.0 | 74.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 F. Bread, rice, maize or other foods made from grains (uburo, amasaka, ingano)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 G. White potatoes, white yams, cassava, or any other foods made from roots?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 16 | 16.7 | 16.7 | 16.7 |
| | Yes | 80 | 83.3 | 83.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 H. Squash, carrots or sweet potatoes that are yellow or orange inside?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 60 | 62.5 | 62.5 | 62.5 |
| | Yes | 36 | 37.5 | 37.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 I. Any dark green leafy vegetables (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 12 | 12.5 | 12.5 | 12.5 |
| | Yes | 84 | 87.5 | 87.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 J. Ripe mangoes, papayas or tomato?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|-------|----|-------|-------|-------|
| Valid | No | 65 | 67.7 | 67.7 | 67.7 |
| | Yes | 31 | 32.3 | 32.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 K. Foods made with red palm oil?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 6 | 6.2 | 6.2 | 6.2 |
| | Yes | 90 | 93.8 | 93.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 L. Any other fruits or vegetables like oranges, (ibicoco, intore), mushroom, pineapple, (amatunda), eggplant, avocado or banana?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 20 | 20.8 | 20.8 | 20.8 |
| | Yes | 76 | 79.2 | 79.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5MEggs

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 69 | 71.9 | 71.9 | 71.9 |
| | Yes | 27 | 28.1 | 28.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 N. Liver, kidney, heart or other organ meats?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 87 | 90.6 | 90.6 | 90.6 |
| | Yes | 9 | 9.4 | 9.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5O. Blood from cows (Ikiremve)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 P. Any meat, such as beef, pork, goat, lamb, chicken, duck, rats, gopher, rabbit, dove or quail?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 80 | 83.3 | 83.3 | 83.3 |
| | Yes | 16 | 16.7 | 16.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 R. Fresh or dried fish?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 38 | 39.6 | 39.6 | 39.6 |
| | Yes | 58 | 60.4 | 60.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 S. Grubs, snails or insects (inswa, isenene, ubunyabobo, ibikenya, ibinyagu)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 T. Any foods made from beans, peas, nuts (inkore, soja) and lentils (intengwa)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 U. Any kinds of oils (ibiyoba, ibihoke, isoya), fats, butter, or foods made with any of these

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 85 | 88.5 | 88.5 | 88.5 |
| | Yes | 11 | 11.5 | 11.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 V. Tea or coffee?

Q5 Y. Any sugary foods, sweets, pastries, donut, biscuits, pop/soda, sugar cane, or honey?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 21 | 21.9 | 21.9 | 21.9 |
| | Yes | 75 | 78.1 | 78.1 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 84 | 87.5 | 87.5 | 87.5 |
| | Yes | 12 | 12.5 | 12.5 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q5 W. Any other liquids (such as banana juice)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | No | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

Q5 Z. Any other food not mentioned?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | 0 | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

#Food groups consumed

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 1 | 2 | 2.1 | 2.1 | 2.1 |
| | 3 | 13 | 13.5 | 13.5 | 15.6 |
| | 4 | 24 | 25.0 | 25.0 | 40.6 |
| | 5 | 31 | 32.3 | 32.3 | 72.9 |
| | 6 | 24 | 25.0 | 25.0 | 97.9 |
| | | | | | |

| | | | | |
|-------|----|-------|-------|-------|
| 7 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6 How many times did (NAME) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 1 | 1.0 | 1.0 | 1.0 |
| | 2 | 6 | 6.2 | 6.2 | 7.3 |
| | 3 | 63 | 65.6 | 65.6 | 72.9 |
| | 4 | 23 | 24.0 | 24.0 | 96.9 |
| | 5 | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q7 Has (NAME) ever received a vitamin A dose (like this/any of these)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q8 Did (NAME) receive a vitamin A dose within the last 6 months?i

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Yes | 87 | 90.6 | 98.9 | 98.9 |
| | No | 1 | 1.0 | 1.1 | 100.0 |
| | Total | 88 | 91.7 | 100.0 | |
| Missing | System | 8 | 8.3 | | |
| Total | | 96 | 100.0 | | |

Q9 Did you receive a card or child health booklet where (name of child's) vaccinations and Vitamin A doses can be written down? If so, can I see the card?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------------------|-----------|---------|---------------|--------------------|
| Valid | 8 | 8.3 | 8.3 | 8.3 |
| Yes, interviewer sees the card | 75 | 78.1 | 78.1 | 86.5 |
| Yes, but card is missing or lost | 7 | 7.3 | 7.3 | 93.8 |
| No, never had a card | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q10 Copy only information related to Vitamine A from the card or booklet

Q10 Vitamin A 1st dose

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid 2011-04-29 | 1 | 1.0 | 1.9 | 1.9 |
| 2011-05-04 | 1 | 1.0 | 1.9 | 3.7 |
| 2011-05-10 | 1 | 1.0 | 1.9 | 5.6 |
| 2011-05-17 | 1 | 1.0 | 1.9 | 7.4 |
| 2011-05-18 | 1 | 1.0 | 1.9 | 9.3 |
| 2011-06-08 | 1 | 1.0 | 1.9 | 11.1 |
| 2011-06-17 | 1 | 1.0 | 1.9 | 13.0 |
| 2011-06-30 | 1 | 1.0 | 1.9 | 14.8 |
| 2011-07-13 | 1 | 1.0 | 1.9 | 16.7 |
| 2011-08-02 | 1 | 1.0 | 1.9 | 18.5 |
| 2011-08-06 | 1 | 1.0 | 1.9 | 20.4 |
| 2011-08-17 | 4 | 4.2 | 7.4 | 27.8 |
| 2011-09-20 | 1 | 1.0 | 1.9 | 29.6 |
| 2011-09-30 | 1 | 1.0 | 1.9 | 31.5 |
| 2011-11-08 | 1 | 1.0 | 1.9 | 33.3 |
| 2011-11-25 | 1 | 1.0 | 1.9 | 35.2 |
| 2011-12-14 | 1 | 1.0 | 1.9 | 37.0 |

| | | | | | |
|---------|------------|----|-------|-------|-------|
| | 2012-01-04 | 1 | 1.0 | 1.9 | 38.9 |
| | 2012-01-11 | 1 | 1.0 | 1.9 | 40.7 |
| | 2012-01-23 | 1 | 1.0 | 1.9 | 42.6 |
| | 2012-01-27 | 1 | 1.0 | 1.9 | 44.4 |
| | 2012-02-29 | 1 | 1.0 | 1.9 | 46.3 |
| | 2012-03-02 | 1 | 1.0 | 1.9 | 48.1 |
| | 2012-03-06 | 1 | 1.0 | 1.9 | 50.0 |
| | 2012-05-11 | 1 | 1.0 | 1.9 | 51.9 |
| | 2012-06-18 | 9 | 9.4 | 16.7 | 68.5 |
| | 2012-06-19 | 5 | 5.2 | 9.3 | 77.8 |
| | 2012-06-20 | 8 | 8.3 | 14.8 | 92.6 |
| | 2012-06-21 | 2 | 2.1 | 3.7 | 96.3 |
| | 2012-07-06 | 1 | 1.0 | 1.9 | 98.1 |
| | 2012-12-19 | 1 | 1.0 | 1.9 | 100.0 |
| | Total | 54 | 56.2 | 100.0 | |
| Missing | System | 42 | 43.8 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 2nd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2011-06-18 | 1 | 1.0 | 7.1 | 7.1 |
| | 2012-06-18 | 2 | 2.1 | 14.3 | 21.4 |
| | 2012-06-19 | 3 | 3.1 | 21.4 | 42.9 |
| | 2012-06-20 | 7 | 7.3 | 50.0 | 92.9 |
| | 2012-06-22 | 1 | 1.0 | 7.1 | 100.0 |
| | Total | 14 | 14.6 | 100.0 | |
| Missing | System | 82 | 85.4 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 3rd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2012-06-19 | 1 | 1.0 | 50.0 | 50.0 |
| | 2012-06-21 | 1 | 1.0 | 50.0 | 100.0 |
| | Total | 2 | 2.1 | 100.0 | |
| Missing | System | 94 | 97.9 | | |
| Total | | 96 | 100.0 | | |

MALARIA

Commune

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Bukirasazi | 24 | 25.0 | 25.0 | 25.0 |
| | Buraza | 24 | 25.0 | 25.0 | 50.0 |
| | Itaba | 24 | 25.0 | 25.0 | 75.0 |
| | Makebuko | 24 | 25.0 | 25.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Age of the Mothers

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | 18 | 1 | 1.0 | 1.0 | 1.0 |
| | 20 | 3 | 3.1 | 3.1 | 4.2 |
| | 21 | 7 | 7.2 | 7.3 | 11.5 |
| | 22 | 2 | 2.1 | 2.1 | 13.5 |
| | 23 | 5 | 5.2 | 5.2 | 18.8 |
| | 24 | 7 | 7.2 | 7.3 | 26.0 |
| | 25 | 8 | 8.2 | 8.3 | 34.4 |
| | 26 | 5 | 5.2 | 5.2 | 39.6 |

| | | | | |
|-------|----|-------|-------|-------|
| 27 | 8 | 8.3 | 8.3 | 47.9 |
| 28 | 4 | 4.2 | 4.2 | 52.1 |
| 29 | 4 | 4.2 | 4.2 | 56.2 |
| 30 | 15 | 15.6 | 15.6 | 71.9 |
| 31 | 2 | 2.1 | 2.1 | 74.0 |
| 32 | 9 | 9.4 | 9.4 | 83.3 |
| 33 | 1 | 1.0 | 1.0 | 84.4 |
| 35 | 4 | 4.2 | 4.2 | 88.5 |
| 36 | 3 | 3.1 | 3.1 | 91.7 |
| 37 | 2 | 2.1 | 2.1 | 93.8 |
| 38 | 2 | 2.1 | 2.1 | 95.8 |
| 40 | 2 | 2.1 | 2.1 | 97.9 |
| 41 | 1 | 1.0 | 1.0 | 99.0 |
| 43 | 1 | 1.0 | 1.0 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Child Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 43 | 44.8 | 44.8 | 44.8 |
| Female | 53 | 55.2 | 55.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Age Of The Child

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Valid 6 | 9 | 9.4 | 9.4 | 9.4 |
| 7 | 11 | 11.5 | 11.5 | 20.8 |
| 8 | 7 | 7.3 | 7.3 | 28.1 |
| 9 | 12 | 12.5 | 12.5 | 40.6 |

| | | | | |
|-------|----|-------|-------|-------|
| 10 | 6 | 6.2 | 6.2 | 46.9 |
| 11 | 8 | 8.2 | 8.3 | 55.2 |
| 12 | 2 | 2.1 | 2.1 | 57.3 |
| 13 | 4 | 4.2 | 4.2 | 61.5 |
| 14 | 7 | 7.3 | 7.3 | 68.8 |
| 15 | 2 | 2.1 | 2.1 | 70.8 |
| 16 | 6 | 6.2 | 6.2 | 77.1 |
| 18 | 4 | 4.2 | 4.2 | 81.2 |
| 19 | 4 | 4.2 | 4.2 | 85.4 |
| 20 | 4 | 4.2 | 4.2 | 89.6 |
| 21 | 2 | 2.1 | 2.1 | 91.7 |
| 22 | 6 | 6.3 | 6.3 | 97.9 |
| 23 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q1 Have you ever attended school?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 11 | 11.5 | 11.5 | 11.5 |
| Yes | 85 | 88.5 | 88.5 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q2 What is the highest grade or level of school you have completed?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid Primary | 63 | 65.6 | 74.1 | 74.1 |
| Secondary | 5 | 5.2 | 5.9 | 80.0 |
| Other | 17 | 17.7 | 20.0 | 100.0 |
| Total | 85 | 88.5 | 100.0 | |
| Missing System | 11 | 11.5 | | |
| Total | 96 | 100.0 | | |

Q3 How many people live in your household?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 3 | 16 | 16.7 | 16.7 | 16.7 |
| | 4 | 19 | 19.8 | 19.8 | 36.5 |
| | 5 | 22 | 22.9 | 22.9 | 59.4 |
| | 6 | 21 | 21.9 | 21.9 | 81.2 |
| | 7 | 12 | 12.5 | 12.5 | 93.8 |
| | 8 | 3 | 3.1 | 3.1 | 96.9 |
| | 9 | 2 | 2.1 | 2.1 | 99.0 |
| | 10 | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q4 Did (NAME) drink/eat:

Q4A Breast milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q4B Plain water?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----|-----------|---------|---------------|--------------------|
| Valid | No | 2 | 2.1 | 2.1 | 2.1 |
| | Yes | 94 | 97.9 | 97.9 | 100.0 |
| Total | | 96 | 100.0 | 100.0 | |

Q4C Cow Milk

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 90 | 93.8 | 93.8 | 93.8 |
| Yes | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4D Banana Juice

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 80 | 83.3 | 83.3 | 83.3 |
| Yes | 16 | 16.7 | 16.7 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4E Commercially produced infant formula?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 3 | 3.1 | 3.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4F Any fortified, commercially available infant and young child food

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 93 | 96.9 | 96.9 | 96.9 |
| Yes | 3 | 3.1 | 3.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q4G Any (other) porridge or gruel?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 26 | 27.1 | 27.1 | 27.1 |
| Yes | 70 | 72.9 | 72.9 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q5. Did (NAME) drink/eat:

Q5A. Commercially produced infant formula?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | No | 92 | 95.8 | 95.8 | 95.8 |
| | Yes | 3 | 3.1 | 3.1 | 99.0 |
| | Don't Know | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5B. Milk such as tinned, powdered, or fresh cow milk?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 94 | 97.9 | 97.9 | 97.9 |
| | Yes | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 C. Yogurt or other milk products?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | No | 93 | 96.9 | 96.9 | 96.9 |
| | Yes | 2 | 2.1 | 2.1 | 99.0 |
| | Don't know | 1 | 1.0 | 1.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 D. Any fortified, commercially available infant and young child food (e.g. Cerelac)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 94 | 97.9 | 97.9 | 97.9 |
| | Yes | 2 | 2.1 | 2.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 E. Any other porridge?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 25 | 26.0 | 26.0 | 26.0 |
| | Yes | 71 | 74.0 | 74.0 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 F. Bread, rice, maize or other foods made from grains (uburo, amasaka, ingano)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 26 | 27.1 | 27.1 | 27.1 |
| | Yes | 70 | 72.9 | 72.9 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 G. White potatoes, white yams, cassava, or any other foods made from roots?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 16 | 16.7 | 16.7 | 16.7 |
| | Yes | 80 | 83.3 | 83.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 H. Squash, carrots or sweet potatoes that are yellow or orange inside?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 60 | 62.5 | 62.5 | 62.5 |
| | Yes | 36 | 37.5 | 37.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 I. Any dark green leafy vegetables (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 12 | 12.5 | 12.5 | 12.5 |
| | Yes | 84 | 87.5 | 87.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 J. Ripe mangoes, papayas or tomato?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|-------|----|-------|-------|-------|
| Valid | No | 65 | 67.7 | 67.7 | 67.7 |
| | Yes | 31 | 32.3 | 32.3 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 K. Foods made with red palm oil?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 6 | 6.2 | 6.2 | 6.2 |
| | Yes | 90 | 93.8 | 93.8 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 L. Any other fruits or vegetables like oranges, (ibicoco, intore), mushroom, pineapple, (amatunda), eggplant, avocado or banana?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 20 | 20.8 | 20.8 | 20.8 |
| | Yes | 76 | 79.2 | 79.2 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5MEggs

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 69 | 71.9 | 71.9 | 71.9 |
| | Yes | 27 | 28.1 | 28.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 N. Liver, kidney, heart or other organ meats?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 87 | 90.6 | 90.6 | 90.6 |
| | Yes | 9 | 9.4 | 9.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5O. Blood from cows (Ikiremve)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 P. Any meat, such as beef, pork, goat, lamb, chicken, duck, rats, gopher, rabbit, dove or quail?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 80 | 83.3 | 83.3 | 83.3 |
| | Yes | 16 | 16.7 | 16.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 R. Fresh or dried fish?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 38 | 39.6 | 39.6 | 39.6 |
| | Yes | 58 | 60.4 | 60.4 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 S. Grubs, snails or insects (inswa, isenene, ubunyabobo, ibikenya, ibinyagu)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----|-----------|---------|---------------|--------------------|
| Valid | No | 96 | 100.0 | 100.0 | 100.0 |

Q5 T. Any foods made from beans, peas, nuts (inkore, soja) and lentils (intengwa)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 U. Any kinds of oils (ibiyoba, ibihoke, isoya), fats, butter, or foods made with any of these

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 85 | 88.5 | 88.5 | 88.5 |
| | Yes | 11 | 11.5 | 11.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 V. Tea or coffee?

Q5 Y. Any sugary foods, sweets, pastries, donut, biscuits, pop/soda, sugar cane, or honey?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 21 | 21.9 | 21.9 | 21.9 |
| | Yes | 75 | 78.1 | 78.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 84 | 87.5 | 87.5 | 87.5 |
| | Yes | 12 | 12.5 | 12.5 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q5 W. Any other liquids (such as banana juice)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | No | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

Q5 Z. Any other food not mentioned?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | 0 | 3 | 3.1 | 100.0 | 100.0 |
| Missing | System | 93 | 96.9 | | |
| Total | | 96 | 100.0 | | |

#Food groups consumed

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | 1 | 2 | 2.1 | 2.1 | 2.1 |
| | 3 | 13 | 13.5 | 13.5 | 15.6 |
| | 4 | 24 | 25.0 | 25.0 | 40.6 |
| | 5 | 31 | 32.3 | 32.3 | 72.9 |
| | 6 | 24 | 25.0 | 25.0 | 97.9 |
| | | | | | |

| | | | | |
|-------|----|-------|-------|-------|
| 7 | 2 | 2.1 | 2.1 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q6 How many times did (NAME) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 1 | 1.0 | 1.0 | 1.0 |
| | 2 | 6 | 6.2 | 6.2 | 7.3 |
| | 3 | 63 | 65.6 | 65.6 | 72.9 |
| | 4 | 23 | 24.0 | 24.0 | 96.9 |
| | 5 | 3 | 3.1 | 3.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q7 Has (NAME) ever received a vitamin A dose (like this/any of these)?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No | 8 | 8.3 | 8.3 | 8.3 |
| | Yes | 88 | 91.7 | 91.7 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

Q8 Did (NAME) receive a vitamin A dose within the last 6 months?i

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Yes | 87 | 90.6 | 98.9 | 98.9 |
| | No | 1 | 1.0 | 1.1 | 100.0 |
| | Total | 88 | 91.7 | 100.0 | |
| Missing | System | 8 | 8.3 | | |
| Total | | 96 | 100.0 | | |

Q9 Did you receive a card or child health booklet where (name of child's) vaccinations and Vitamin A doses can be written down? If so, can I see the card?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------------------|-----------|---------|---------------|--------------------|
| Valid | 8 | 8.3 | 8.3 | 8.3 |
| Yes, interviewer sees the card | 75 | 78.1 | 78.1 | 86.5 |
| Yes, but card is missing or lost | 7 | 7.3 | 7.3 | 93.8 |
| No, never had a card | 6 | 6.2 | 6.2 | 100.0 |
| Total | 96 | 100.0 | 100.0 | |

Q10 Copy only information related to Vitamine A from the card or booklet

Q10 Vitamin A 1st dose

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid 2011-04-29 | 1 | 1.0 | 1.9 | 1.9 |
| 2011-05-04 | 1 | 1.0 | 1.9 | 3.7 |
| 2011-05-10 | 1 | 1.0 | 1.9 | 5.6 |
| 2011-05-17 | 1 | 1.0 | 1.9 | 7.4 |
| 2011-05-18 | 1 | 1.0 | 1.9 | 9.3 |
| 2011-06-08 | 1 | 1.0 | 1.9 | 11.1 |
| 2011-06-17 | 1 | 1.0 | 1.9 | 13.0 |
| 2011-06-30 | 1 | 1.0 | 1.9 | 14.8 |
| 2011-07-13 | 1 | 1.0 | 1.9 | 16.7 |
| 2011-08-02 | 1 | 1.0 | 1.9 | 18.5 |
| 2011-08-06 | 1 | 1.0 | 1.9 | 20.4 |
| 2011-08-17 | 4 | 4.2 | 7.4 | 27.8 |
| 2011-09-20 | 1 | 1.0 | 1.9 | 29.6 |
| 2011-09-30 | 1 | 1.0 | 1.9 | 31.5 |
| 2011-11-08 | 1 | 1.0 | 1.9 | 33.3 |
| 2011-11-25 | 1 | 1.0 | 1.9 | 35.2 |
| 2011-12-14 | 1 | 1.0 | 1.9 | 37.0 |

| | | | | | |
|---------|------------|----|-------|-------|-------|
| | 2012-01-04 | 1 | 1.0 | 1.9 | 38.9 |
| | 2012-01-11 | 1 | 1.0 | 1.9 | 40.7 |
| | 2012-01-23 | 1 | 1.0 | 1.9 | 42.6 |
| | 2012-01-27 | 1 | 1.0 | 1.9 | 44.4 |
| | 2012-02-29 | 1 | 1.0 | 1.9 | 46.3 |
| | 2012-03-02 | 1 | 1.0 | 1.9 | 48.1 |
| | 2012-03-06 | 1 | 1.0 | 1.9 | 50.0 |
| | 2012-05-11 | 1 | 1.0 | 1.9 | 51.9 |
| | 2012-06-18 | 9 | 9.4 | 16.7 | 68.5 |
| | 2012-06-19 | 5 | 5.2 | 9.3 | 77.8 |
| | 2012-06-20 | 8 | 8.3 | 14.8 | 92.6 |
| | 2012-06-21 | 2 | 2.1 | 3.7 | 96.3 |
| | 2012-07-06 | 1 | 1.0 | 1.9 | 98.1 |
| | 2012-12-19 | 1 | 1.0 | 1.9 | 100.0 |
| | Total | 54 | 56.2 | 100.0 | |
| Missing | System | 42 | 43.8 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 2nd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2011-06-18 | 1 | 1.0 | 7.1 | 7.1 |
| | 2012-06-18 | 2 | 2.1 | 14.3 | 21.4 |
| | 2012-06-19 | 3 | 3.1 | 21.4 | 42.9 |
| | 2012-06-20 | 7 | 7.3 | 50.0 | 92.9 |
| | 2012-06-22 | 1 | 1.0 | 7.1 | 100.0 |
| | Total | 14 | 14.6 | 100.0 | |
| Missing | System | 82 | 85.4 | | |
| Total | | 96 | 100.0 | | |

Q10 Vitamin A 3rd dose

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | 2012-06-19 | 1 | 1.0 | 50.0 | 50.0 |
| | 2012-06-21 | 1 | 1.0 | 50.0 | 100.0 |
| | Total | 2 | 2.1 | 100.0 | |
| Missing | System | 94 | 97.9 | | |
| Total | | 96 | 100.0 | | |

ANNEX 2: SAMPLING FRAME

**KIBUYE
HEALTH
DISTRICT
SAMPLING
FRAME**

**1. COMMUNE
BUKIRASAZI**

*Sampling Interval= Total number of pop divided
by 24*

Random Number= three digits (first or last) in a way that the number should be smaller than the sampling interval.

*TOTAL POPULATION IN
BUKIRASAZI*

35,084

*Sampling Interval =
1462*

*Random Number =
385*

| HC | Colline | Sbcolline | NK | Population | Cumulative Population | |
|------------|---------|-----------|----|------------|--------------------------|-----|
| Bukirasazi | Migano | Muyaga | 3 | 617 | 617 | 385 |
| Bukirasazi | Migano | Nyabuhoro | 2 | 205 | 822 | 1 |
| Bukirasazi | Migano | Buraza | 3 | 602 | 1,424 | |

| | | | | | | | |
|------------|-------------------------|-----------|----|------|--------|-------|----|
| Bukirasazi | Rwinyana | Rwinyana | 5 | 819 | 2,243 | 1847 | 2 |
| Bukirasazi | Shaya | Shaya | 4 | 432 | 2,675 | | |
| Bukirasazi | Rukoki | Rukoki | 5 | 568 | 3,243 | | |
| Bukirasazi | Rukoki | Kamanda | 14 | 1472 | 4,715 | 3309 | 3 |
| Bukirasazi | Rukoki | Jondi | 6 | 601 | 5,316 | 4771 | 4 |
| Bukirasazi | Kibere | Kibere | 10 | 1233 | 6,549 | 6233 | 5 |
| Bukirasazi | Kibere | Kayenzi | 7 | 819 | 7,368 | | |
| Bukirasazi | Nyamisur e | Nyamisure | 1 | 301 | 7,669 | | |
| Bukirasazi | Nyamisur e | Mihama | 10 | 1315 | 8,984 | 7695 | 6 |
| Bukirasazi | Nyamisur e | Kivumu | 4 | 609 | 9,593 | 9157 | 7 |
| Bukirasazi | Nyamisur e | Nyamugali | 8 | 1112 | 10,705 | 10619 | 8 |
| Bukirasazi | Bunyuka | Bunyuka | 7 | 911 | 11,616 | | |
| Bukirasazi | Bunyuka Nyambuy e | Kamusase | 4 | 714 | 12,330 | 12081 | 9 |
| Bukirasazi | Nyambuy e | Nunga | 7 | 603 | 12,933 | | |
| Bukirasazi | Nyambuy e | Nyambuye | 8 | 579 | 13,512 | | |
| Bukirasazi | Rugabano | Rugabano | 6 | 884 | 14,396 | 13543 | 10 |
| Bukirasazi | Rugabano | Cogo | 6 | 912 | 15,308 | 15005 | 11 |
| Bukirasazi | Rugabano | Magamba | 2 | 382 | 15,690 | | |
| Kibuye | Tema | Gishanga | 3 | 345 | 16,035 | | |
| Kibuye | Tema | Gatumba | 3 | 319 | 16,354 | | |
| Kibuye | Ruhinda | Ruhinda | 8 | 700 | 17,054 | 16467 | 12 |
| Kibuye | Ruhinda | Rima | 4 | 600 | 17,654 | | |
| Kibuye | Gasongati | Gasongati | 7 | 849 | 18,503 | 17929 | 13 |
| Kibuye | Gasongati | Kiramba | 5 | 601 | 19,104 | | |
| Kibuye | Gasongati | Gakindo | 5 | 698 | 19,802 | 19391 | 14 |
| Kibuye | Ruvumu | Ruhwama | 4 | 536 | | | |

| | | | | | | | |
|------------|------------|------------|----|------|--------|-------|----|
| | | | | | 20,338 | | |
| Kibuye | Ruvumu | Gihogoro | 3 | 340 | 20,678 | | |
| Kibuye | Ruvumu | Nyamurenge | 3 | 388 | 21,066 | 20853 | 15 |
| Kibuye | Kibuye | Bijo | 10 | 1560 | 22,626 | 22315 | 16 |
| Kibuye | Kibuye | Kirambi | 7 | 1309 | 23,935 | 23777 | 17 |
| Kibuye | Kibuye | Murambi | 9 | 1260 | 25,195 | | |
| Kibuye | Kibuye | Muringa | 6 | 802 | 25,997 | 25239 | 18 |
| Bukirasazi | Mpingwe | Kidida | 5 | 773 | 26,770 | 26701 | 19 |
| Bukirasazi | Mpingwe | Gikombe | 3 | 358 | 27,128 | | |
| Bukirasazi | Mpingwe | Gikobe | 5 | 523 | 27,651 | | |
| Bukirasazi | Mpingwe | Kinyonza | 5 | 430 | 28,081 | | |
| Bukirasazi | Buhanda | Muvumera | 6 | 802 | 28,883 | 28163 | 20 |
| Bukirasazi | Buhanda | Kinanari | 5 | 598 | 29,481 | | |
| Bukirasazi | Buhanda | Rwatwenzi | 6 | 572 | 30,053 | 29625 | 21 |
| Bukirasazi | Rugoma | Murambi | 4 | 567 | 30,620 | | |
| Bukirasazi | Rugoma | Kiryama | 4 | 454 | 31,074 | | |
| Bukirasazi | Rugoma | Gatongati | 5 | 551 | 31,625 | 31087 | 22 |
| Bukirasazi | Bukirasazi | Nyabiziba | 5 | 599 | 32,224 | | |
| Bukirasazi | Bukirasazi | Muremera | 4 | 495 | 32,719 | 32549 | 23 |
| Bukirasazi | Bukirasazi | Bukirasazi | 15 | 2365 | 35,084 | 34011 | 24 |

**KIBUYE HEALTH
DISTRICT SAMPLING
FRAME**

2. COMMUNE BURAZA

TOTAL POPULATION IN BURAZA 47,066 *Sampling Interval= 1961*
Random Number= 443

| HC | Colline | Sbcolline | NK | Population | Cumulative Population | | |
|--------|----------|------------|----|------------|--------------------------|-------|----|
| Buraza | Kabumbe | Kabumbe | 3 | 514 | 514 | 443 | 25 |
| Buraza | Kabumbe | Rabiro | 3 | 860 | 1374 | | |
| Buraza | Kabumbe | Rutobe | 3 | 627 | 2001 | | |
| Buraza | Ndava | Ndava | 5 | 438 | 2439 | 2404 | 26 |
| Buraza | Ndava | Mirenda | 4 | 565 | 3004 | | |
| Buraza | Ndava | Gitaba | 4 | 531 | 3535 | | |
| Buraza | Buriza | Kizama | 6 | 554 | 4089 | | |
| Buraza | Buriza | Buriza | 11 | 1525 | 5614 | 4365 | 27 |
| Buraza | Buriza | Ruvumu | 8 | 1240 | 6854 | 6326 | 28 |
| Buraza | Musebeyi | Jerama | 5 | 618 | 7472 | | |
| Buraza | Musebeyi | Nyarunyoni | 3 | 620 | 8092 | | |
| Buraza | Musebeyi | Musebeyi | 7 | 897 | 8989 | 8287 | 29 |
| Buraza | Buraza | Buraza I | 12 | 1114 | 10103 | | |
| Buraza | Buraza | Buraza II | | 769 | 10872 | 10248 | 30 |
| Buraza | Buraza | Mutara | 8 | 983 | 11855 | | |
| Buraza | Mugamo | Mugano | 7 | 1234 | 13089 | 12209 | 31 |
| Buraza | Mugamo | Cunguza | 6 | 1418 | 14507 | 14170 | 32 |
| Buraza | Mugamo | Kirinzi | 7 | 807 | 15314 | | |
| Buraza | Mugamo | Cabumba | 6 | 756 | 16070 | | |
| Buraza | Maza | Nyarubimba | 5 | 1011 | 17081 | 16131 | 33 |

| | | | | | | | |
|-----------|------------|---------------|----|------|-------|-------|----|
| Buraza | Maza | Nyarugunza | 6 | 991 | 18072 | | |
| Buraza | Maza | Nyabasase | 5 | 500 | 18572 | 18092 | 34 |
| Buraza | Maza | Maza | 4 | 518 | 19090 | | |
| Buraza | Bubaji | Mponyi | 6 | 574 | 19664 | | |
| Buraza | Bubaji | Nyarubungo | 7 | 1096 | 20760 | 20053 | 35 |
| Buraza | Bubaji | Bubazi | 6 | 799 | 21559 | | |
| Buraza | Gicumbi | Mpunju | 6 | 800 | 22359 | 22014 | 36 |
| Buraza | Gicumbi | Nyakarenda | 6 | 573 | 22932 | | |
| Buraza | Gicumbi | Nkunda | 12 | 1328 | 24260 | 23975 | 37 |
| Buraza | Gitaramuka | Mujejuru | 7 | 992 | 25252 | | |
| Buraza | Gitaramuka | Gitaramuka I | 12 | 931 | 26183 | 25936 | 38 |
| Buraza | Gitaramuka | Gitaramuka II | | 966 | 27149 | | |
| Buraza | Gitaramuka | Ngoringori | 6 | 918 | 28067 | 27897 | 39 |
| Buraza | Mahonda | Mahonda | 7 | 1295 | 29362 | | |
| Buraza | Mahonda | Kirambi | 7 | 1682 | 31044 | 29858 | 40 |
| Buraza | Mahonda | Karunyinya | 8 | 1252 | 32296 | 31819 | 41 |
| Buraza | Rweza | Rweza | 3 | 305 | 32601 | | |
| Buraza | Rweza | Manege | 4 | 346 | 32947 | | |
| Buraza | Rweza | Nenge | 2 | 250 | 33197 | | |
| Buraza | Muyange | Muyange | 5 | 1009 | 34206 | 33780 | 42 |
| Buraza | Muyange | Rubira | 7 | 822 | 35028 | | |
| Buraza | Muyange | Buhogo | 4 | 890 | 35918 | 35741 | 43 |
| Nyarunazi | Butezi | Butezi | 7 | 933 | 36851 | | |
| Nyarunazi | Butezi | Nyangungu | 7 | 937 | 37788 | 37702 | 44 |
| Nyarunazi | Butezi | Nyakabuye | 7 | 940 | 38728 | | |
| Nyarunazi | Bibate | Kabaragaza | 7 | 528 | 39256 | | |
| Nyarunazi | Bibate | Bibate | 5 | 854 | 40110 | 39663 | 45 |
| Nyarunazi | Bugega | Kivoga I | 9 | 509 | 40619 | | |
| Nyarunazi | Bugega | Kivoga II | | 888 | 41507 | | |
| Nyarunazi | Bugega | Bugega | 7 | 1031 | 42538 | 41624 | 46 |
| Nyarunazi | Butemba | Rugegene | 5 | 838 | 43376 | | |
| Buraza | Gisura | Gisura | 5 | 520 | 43896 | 43585 | 47 |
| Buraza | Gisura | Ndaro | 6 | 560 | 44456 | | |

| | | | | | | | |
|-----------|-------|---------|----|-----|-------|-------|----|
| Nyarunazi | Ndago | Rango | 10 | 910 | 45366 | | |
| Nyarunazi | Ndago | Gihete | 8 | 938 | 46304 | 45546 | 48 |
| Nyarunazi | Ndago | Rufunzo | | 762 | 47066 | | |

KIBUYE HEALTH DISTRICT SAMPLING FRAME

3. COMMUNE ITABA

TOTAL POPULATION IN ITABA 52,250

Sampling Interval= 2177
Random Number= 999

| HC | Colline | Sbcolline | NK | Population | Cumulative Population | | Clusters |
|----------|----------|-----------|----|------------|-----------------------|------|----------|
| Gisikara | Gisikara | Gashingwe | | 5 | 440 | 440 | |
| Gisikara | Gisikara | Murambi | | 7 | 875 | 1315 | 999 |
| Gisikara | Gisikara | Nyakabuye | | 6 | 598 | 1913 | |
| Gisikara | Gisikara | Muhoza | | 5 | 658 | 2571 | |
| Gisikara | Gisikara | Kabago | | 2 | 582 | 3153 | |
| Gisikara | Gisikara | Kinyaruko | | 3 | 287 | 3440 | 3176 |
| Gisikara | Gisikara | Bigera | | 5 | 539 | 3979 | |
| Gisikara | Gisikara | Musenga | | 10 | 485 | 4464 | |
| Gisikara | Gisikara | Kinovu | | 5 | 649 | 5113 | |
| Gisikara | Gisikara | Rusange | | 5 | 424 | 5537 | 5353 |
| | | | | | | | 51 |

| | | | | | | | |
|----------|------------|---------------|----|------|-------|-------|----|
| Buhinda | Gihamagara | Gihamagara | 4 | 764 | 6301 | | |
| Buhinda | Gihamagara | Kabanga | 7 | 662 | 6963 | | |
| Buhinda | Gihamagara | Mujejuru | 11 | 676 | 7639 | 7530 | 52 |
| Buhinda | Gihamagara | Site Mujejuru | | 972 | 8611 | | |
| Gisikara | Kanyinya | Kanyinya | 6 | 396 | 9007 | | |
| Gisikara | Kanyinya | Gisoro | 4 | 214 | 9221 | | |
| Gisikara | Kanyinya | Vyisure | 4 | 283 | 9504 | | |
| Buhinda | Itaba | Gikombe | 10 | 571 | 10075 | 9707 | 53 |
| Buhinda | Itaba | Ngarama | 9 | 672 | 10747 | | |
| Buhinda | Mugomera | Kaburanjwiri | 3 | 506 | 11253 | | |
| Buhinda | Mugomera | Gaterama | 3 | 409 | 11662 | | |
| Buhinda | Mugomera | Nyarubungo | 4 | 397 | 12059 | 11884 | 54 |
| Buhinda | Kugitega | Muramba | 4 | 279 | 12338 | | |
| Buhinda | Kugitega | Munyegera | 6 | 519 | 12857 | | |
| Buhinda | Kugitega | Nyabikinja | 4 | 370 | 13227 | | |
| Buhinda | Buhinda | Sakanyege | 11 | 421 | 13648 | | |
| Buhinda | Buhinda | Kibasi | 5 | 290 | 13938 | | |
| Buhinda | Buhinda | Karama | 9 | 487 | 14425 | 14061 | 55 |
| Buhinda | Buhinda | Rugabo | 9 | 353 | 14778 | | |
| Buhinda | Buhinda | Runazi | 5 | 289 | 15067 | | |
| Buhinda | Buhinda | Ruvumu | 5 | 308 | 15375 | | |
| Buhinda | Buhinda | Buhinda | 5 | 283 | 15658 | | |
| Buhinda | Buhinda | Gakombe | 5 | 398 | 16056 | | |
| Buhinda | Ruhanza | Muyange | 6 | 453 | 16509 | 16238 | 56 |
| Buhinda | Ruhanza | Muyogoro | 3 | 306 | 16815 | | |
| Buhinda | Ruhanza | Buramba | 5 | 251 | 17066 | | |
| Buhinda | Ruhanza | Rutyazo | 5 | 464 | 17530 | | |
| Buhinda | Ruhanza | Rukuku | 7 | 606 | 18136 | | |
| Buhinda | Ruhanza | Ruhanza | 4 | 251 | 18387 | | |
| Buhinda | Ruhanza | Nyabushishi | 10 | 584 | 18971 | 18415 | 57 |
| Buhinda | Ruhanza | Mwenene | 5 | 419 | 19390 | | |
| Buhinda | Ruhanza | Mutumba | 3 | 224 | 19614 | | |
| Gisikara | Mutanga | Mutanga | 7 | 1238 | 20852 | 20592 | 58 |

| | | | | | | | |
|----------|-----------|---------------|----|------|-------|-------|----|
| Gisikara | Mutanga | Kigera | 4 | 542 | 21394 | | |
| Gisikara | Mutanga | Nzigi | 7 | 575 | 21969 | | |
| Gisikara | Butare | Gahonyi | 7 | 543 | 22512 | | |
| Gisikara | Butare | Karuguta | 9 | 465 | 22977 | 22769 | 59 |
| Gisikara | Butare | Nyagifu | 6 | 414 | 23391 | | |
| Gisikara | Nkima | Rango | 5 | 424 | 23815 | | |
| Gisikara | Nkima | Rwimvura | 4 | 278 | 24093 | | |
| Gisikara | Buhanga | Buhanga | 6 | 432 | 24525 | | |
| Gisikara | Buhanga | Rango | 7 | 730 | 25255 | 24946 | 60 |
| Buhoro | Rukobe I | Rukobe | 6 | 314 | 25569 | | |
| Buhoro | Rukobe I | Gihamba | 7 | 764 | 26333 | | |
| Buhoro | Rukobe I | Bwinjira | 8 | 573 | 26906 | | |
| Buhoro | Rukobe I | Nyarurambi | 11 | 599 | 27505 | 27123 | 61 |
| Buhoro | Rukobe I | Sesero | 15 | 582 | 28087 | | |
| Buhoro | Kagoma | Kabago | 8 | 270 | 28357 | | |
| Buhoro | Kagoma | Muhweza | 8 | 507 | 28864 | | |
| Buhoro | Kagoma | Mutumba | 9 | 633 | 29497 | 29300 | 62 |
| Buhoro | Kagoma | Nyarusange | 6 | 473 | 29970 | | |
| Buhoro | Kagoma | Shungwe | 11 | 827 | 30797 | | |
| Buhoro | Rukobe II | Buhoro | 27 | 1326 | 32123 | 31477 | 63 |
| Buhoro | Rukobe II | Rutegama I | 9 | 535 | 32658 | | |
| Buhoro | Rukobe II | Rutegama II | 16 | 1214 | 33872 | 33654 | 64 |
| Buhoro | Rukobe II | Gasunu | 15 | 523 | 34395 | | |
| Buhoro | Rukobe II | Site Buhoro | | 759 | 35154 | | |
| Buhoro | Rukobe II | Kigozi | 13 | 852 | 36006 | 35831 | 65 |
| Buhoro | Rukobe II | Site Gisikara | | 1709 | 37715 | | |
| Buhinda | Kibogoye | Kibogoye | 10 | 648 | 38363 | 38008 | 66 |
| Buhinda | Kibogoye | Buzige | 4 | 274 | 38637 | | |
| Buhinda | Kibogoye | Muzenga | 11 | 736 | 39373 | | |
| Buhinda | Kibogoye | Kidonzi | 6 | 396 | 39769 | | |
| Buhinda | Kibogoye | Rwaza | 6 | 384 | 40153 | | |
| Buhinda | Kibogoye | Gashwabure | 18 | 837 | 40990 | 40185 | 67 |
| Buhinda | Kibogoye | Pfunyangeso | 11 | 608 | 41598 | | |

| | | | | | | | |
|----------|----------|------------|----|------|-------|-------|----|
| Buhinda | Kibogoye | Kirembe | 6 | 292 | 41890 | | |
| Buhinda | Kibogoye | Rusasa | 10 | 421 | 42311 | | |
| Buhinda | Kibogoye | Gishiga | 7 | 621 | 42932 | 42362 | 68 |
| Buhinda | Kibogoye | Kanyinya | 6 | 343 | 43275 | | |
| Gisikara | Macu | Nyamurenge | 8 | 595 | 43870 | | |
| Gisikara | Macu | Nyarubimba | 9 | 536 | 44406 | | |
| Gisikara | Macu | Rusabe | 9 | 587 | 44993 | 44539 | 69 |
| Gisikara | Karembe | Karembe | 4 | 518 | 45511 | | |
| Gisikara | Karembe | Gitaba | 5 | 570 | 46081 | | |
| Gisikara | Karembe | Kivoga | 9 | 931 | 47012 | 46716 | 70 |
| Buhoro | Kanyonga | Cari | 15 | 817 | 47829 | | |
| Buhoro | Kanyonga | Kigarama | 16 | 813 | 48642 | | |
| Buhoro | Kanyonga | Murore | 6 | 243 | 48885 | | |
| Buhoro | Kanyonga | Ndaro | 4 | 165 | 49050 | 48893 | 71 |
| Buhoro | Kanyonga | Ngoma | 21 | 978 | 50028 | | |
| Buhoro | Kanyonga | Ruvumu | 25 | 1126 | 51154 | 51070 | 72 |
| Gisikara | Kirambi | Kiniha | 8 | 165 | 51319 | | |
| Gisikara | Kirambi | Kivoga | 4 | 931 | 52250 | | |

KIBUYE HEALTH DISTRICT SAMPLING FRAME

4. COMMUNE MAKEBUKO

TOTAL POPULATION IN MAKEBUKO 62,608

Sampling Interval=
2609
Random Number= 407

| HC | Colline | Sbcolline | NK | Population | Cumulative Population | Clusters |
|----|---------|-----------|----|------------|--------------------------|----------|
|----|---------|-----------|----|------------|--------------------------|----------|

| | | | | | | | |
|----------|------------|---------------|----|------|-------|-------|----|
| Maramvya | Buga | Bitaka | 13 | 1309 | 1309 | 407 | 73 |
| Maramvya | Buga | Kanyinya | 11 | 829 | 2138 | | |
| Maramvya | Buga | Musenyi | 12 | 1425 | 3563 | 3016 | 74 |
| Makebuko | Bugumbasha | Bugumbasha | 4 | 504 | 4067 | | |
| Makebuko | Bugumbasha | Kivoga | 13 | 1022 | 5089 | | |
| Murenda | Butobwe | Butobwe | 8 | 1090 | 6179 | 5625 | 75 |
| Murenda | Butobwe | Mwaka-Kirambi | 4 | 430 | 6609 | | |
| Makebuko | Gasagara | Gasagara | 8 | 1022 | 7631 | | |
| Makebuko | Gasagara | Kibere | 7 | 588 | 8219 | | |
| Makebuko | Gasagara | Nyakivumvu | 9 | 546 | 8765 | 8234 | 76 |
| Makebuko | Gasasa | Gasasa | 9 | 1260 | 10025 | | |
| Makebuko | Gasasa | Gitega | 6 | 720 | 10745 | | |
| Murenda | Gasenyi | Gasenyi | 8 | 853 | 11598 | 10843 | 77 |
| Murenda | Gasenyi | Sumo | 3 | 352 | 11950 | | |
| Bungere | Janja | Kayinajanja | 12 | 1248 | 13198 | | |
| Bungere | Janja | Muhurika | 9 | 889 | 14087 | 13452 | 78 |
| Bungere | Janja | Nyamirambo | 8 | 895 | 14982 | | |
| Bungere | Janja | Runanku | 4 | 433 | 15415 | | |
| Makebuko | Kagege | Kabingo | 4 | 313 | 15728 | | |
| Makebuko | Kagege | Kagege | 5 | 369 | 16097 | 16061 | 79 |
| Bungere | Karoba | Gasenyi | 5 | 693 | 16790 | | |
| Bungere | Karoba | Gikombe | 9 | 1500 | 18290 | | |
| Bungere | Karoba | Karoba | 6 | 954 | 19244 | 18670 | 80 |
| Murenda | Kinyonza | Kinyonsa | 6 | 650 | 19894 | | |
| Murenda | Kinyonza | Nyabwigungo | 6 | 577 | 20471 | | |
| Bungere | Kiyange | Gaterama | 6 | 897 | 21368 | 21279 | 81 |
| Bungere | Kiyange | Kababaza | 5 | 786 | 22154 | | |
| Bungere | Kiyange | Kiyange | 6 | 872 | 23026 | | |
| Bungere | Kiyange | Nyarusange | 8 | 1244 | 24270 | 23888 | 82 |
| Makebuko | Makebuko | Buyegamo | 12 | 473 | 24743 | | |
| Makebuko | Makebuko | Gitanga | 4 | 418 | 25161 | | |
| Makebuko | Makebuko | Makebuko | 5 | 1064 | 26225 | | |
| Murenda | Muhororo | Muhororo | 17 | 1164 | 27389 | 26497 | 83 |

| | | | | | | | |
|----------|--------------|--------------|----|------|-------|-------|----|
| Murenda | Muhororo | Nyamurenge | 13 | 863 | 28252 | | |
| Bungere | Murago | Bungere | 10 | 911 | 29163 | 29106 | 84 |
| Bungere | Murago | Murago | 11 | 892 | 30055 | | |
| Bungere | Murago | Gakonko | 13 | 729 | 30784 | | |
| Murenda | Murenda | Burarana | 10 | 1258 | 32042 | 31715 | 85 |
| Murenda | Murenda | Murenda | 7 | 861 | 32903 | | |
| Maramvya | Musave | Maramvya | 6 | 827 | 33730 | | |
| Maramvya | Musave | Musave | 11 | 1110 | 34840 | 34324 | 86 |
| Bungere | Muyange | Muyange | 6 | 545 | 35385 | | |
| Bungere | Muyange | Ncana | 3 | 505 | 35890 | | |
| Bungere | Muyange | Rutovu | 13 | 1501 | 37391 | 36933 | 87 |
| Bungere | Muyange | Mitari | 5 | 488 | 37879 | | |
| Murenda | Mwanzari | Mwanzari | 5 | 470 | 38349 | | |
| Murenda | Mwanzari | Nkingu | 4 | 533 | 38882 | | |
| Murenda | Mwanzari | Buja | 6 | 175 | 39057 | | |
| Maramvya | Mwaro-Mavuvu | Mwaro-Mavuvu | 5 | 927 | 39984 | 39542 | 88 |
| Maramvya | Mwaro-Mavuvu | Rwego | 6 | 748 | 40732 | | |
| Makebuko | Mwaro-Ngundu | Munyinya | 4 | 562 | 41294 | | |
| Makebuko | Mwaro-Ngundu | Mwaro-Ngundu | 4 | 2217 | 43511 | 42151 | 89 |
| Makebuko | Mwaro-Ngundu | SITE | 15 | | 43511 | | |
| Murenda | Mwumba | Karambi | 11 | 1012 | 44523 | | |
| Murenda | Mwumba | Mwumba | 8 | 974 | 45497 | 44760 | 90 |
| Murenda | Nyamagamdika | Kibenga | 7 | 747 | 46244 | | |
| Murenda | Nyamagamdika | Nyamagamdika | 6 | 802 | 47046 | | |
| Makebuko | Ntita | Ntita | 8 | 892 | 47938 | 47369 | 91 |
| Makebuko | Ntita | Taba | 4 | 397 | 48335 | | |
| Makebuko | Rusagara | Rubimba | 9 | 1046 | 49381 | | |
| Makebuko | Rusagara | Rukinya | 12 | 1020 | 50401 | 49978 | 92 |
| Makebuko | Rusagara | Rusagara | 4 | 1181 | 51582 | | |
| Murenda | Rutanganika | Kanyami | 12 | 1194 | 52776 | | |
| Murenda | Rutanganika | Nyagasozzi | 8 | 825 | 53601 | 52587 | 93 |
| Murenda | Rutanganika | Nyamishiha | 8 | 613 | 54214 | | |
| Murenda | Rutanganika | Rutanganyika | 10 | 1171 | 55385 | 55196 | 94 |

| | | | | | | | |
|----------|------------|----------|---|-----|-------|-------|----|
| Makebuko | Rwanda | Gitaba | 7 | 899 | 56284 | | |
| Makebuko | Rwanda | Kabukaro | 6 | 377 | 56661 | | |
| Makebuko | Rwanda | Rwanda | 9 | 825 | 57486 | | |
| Makebuko | Rwesero | Kajenda | 7 | 753 | 58239 | 57805 | 95 |
| Makebuko | Rwesero | Kidasha | 5 | 811 | 59050 | | |
| Maramvya | Rwezamenyo | Buhunja | 6 | 683 | 59733 | | |
| Maramvya | Rwezamenyo | Bumba | 5 | 378 | 60111 | | |
| Maramvya | Rwezamenyo | Buye | 3 | 314 | 60425 | 60414 | 96 |
| Bungere | Simba | Gatwara | 9 | 810 | 61235 | | |
| Bungere | Simba | Simba | 7 | 825 | 62060 | | |
| Bungere | Simba | Nyakara | 6 | 548 | 62608 | | |

ANNEX 3: QUESTIONNAIRES IN ENGLISH AND KIRUNDI

0-23 MONTHS ENGLISH

Midterm KPC Survey Questionnaire- LQAS Parallel Sampling

Tracking table for completed questionnaires

| After each interview check for completed questionnaires | Checking box |
|--|---------------------|
| | ✓ |
| 1. Questionnaire for Mothers of Children with 0-23 months old | |

| | |
|--|--|
| 2. Questionnaire for Mothers of Children with 0-5 months old | |
| 3. Questionnaire for Mothers of Children with 6-23 months old | |
| 4. Questionnaire for Mothers of Children with 12-23 months old | |
| 5. Questionnaire for Mothers of Children who experienced fever/malaria during the last two weeks | |
| 6. Questionnaire for Mothers of Children who experienced Diarrhea during the last two weeks | |
| 7. Questionnaire for Mothers of Children who experienced Pneumonia during the last two weeks | |

| FOR DATA ENTRY PERSONNEL ONLY | | |
|--------------------------------------|-------------|-------------|
| | Name | Date |
| Team leader review**: | | |
| Keyed by: | | |

**Review for completion – all answers answered, skip patterns followed, etc.

Survey Questionnaire

INFORMED CONSENT

Hello. My name is _____, and I am working with World Relief. We are conducting a survey and would appreciate your participation. I would like to ask you about your health and the health of your youngest child under the age of two. This information will help World Relief to plan health services and assess whether it is meeting its goals to improve children's health. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED
 RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD LESS THAN 24 MONTHS OF AGE

RESPONDENT IDENTIFICATION

| | | |
|------------------------------------|---|--|
| Record Number | | |
| Interviewer Name | | |
| Commune | 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko | |
| Colline | | |
| Souscolline | | |
| Household # | Commune / Souscolline / HH / Questionnaire Ex. BUK / 01 / 1 / Q1 |/...../...../..... |
| NAME OF THE MOTHER _____ | | NAME OF THE CHILD LESS THAN 24 MONTHS _____ |
| AGE OF THE MOTHER (IN YEARS) | | SEX OF CHILD (1=MALE, 2=FEMALE)..... |
| | | DATE OF BIRTH ____/____/____ |
| | | AGE OF THE CHILD (IN MONTHS) |
| Date of Interview | |/...../..... |

| | | |
|----------------------|----|----|
| Time interview began | AM | PM |
| Time interview ended | AM | PM |

| # | Questions | Responses | Skip | Answer |
|---|--|---|------|--------|
| SECTION A: SOCIO-DEMOGRAPHICS | | | | |
| INSTRUCTIONS: ASK THE QUESTIONS EXACTLY AS THEY ARE WRITTEN. DO NOT READ RESPONSES UNLESS DIRECTED TO DO SO. WORDS IN <i>ITALICS</i> ARE INSTRUCTIONS FOR THE INTERVIEWER AND SHOULD NOT BE READ ALOUD. FOLLOW SKIP PATTERNS AS DIRECTED. WRITE ANSWERS IN THE ANSWER BOX UNLESS OTHERWISE DIRECTED. | | | | |
| 1. | Have you ever attended school? | Yes..... 1 No..... 0 → 3 Don't know..... 88 → 3 No response..... 99 → 3 | | |
| 2. | <i>If yes, then ask:</i> What is the highest grade or level of school you have completed? | No School..... 1 Primary..... 2 Secondary..... 3 Past Secondary 4 Other..... 5 | | |
| 3. | How many people live in your household? | Number..... ## Don't know..... 88 No response 99 | | |
| SECTION B: MATERNAL AND NEWBORN CARE | | | | |
| 4. | During your pregnancy with (name of child) did you sleep under a mosquito net? | Yes.....1 No.....0 → 6 Don't know.....88 → 6 No response.....99 → 6 | | |
| 5. | Did you sleep under the net all the time, most of the time, some of the time, or occasionally? | All of the timeA Most of the timeB Some of the timeC OccasionallyD | | |
| 6. | During your pregnancy with (Name), did you receive antenatal care? | Yes.....1 No.....0 → 10 Don't know.....88 → 10 No response.....99 → 10 | | |
| 7. | During your pregnancy with (Name), how many months pregnant were you when you first received antenatal care? | Months <input type="text"/> <input type="text"/> Don't Know.....99 | | |
| 8. | During your pregnancy with (Name) did you receive an injection in the arm to prevent the baby from getting tetanus, that is convulsions after birth? | Yes.....1 No.....0 → 10 Don't Know.....99 → 10 | | |
| 9. | While pregnant with (name), how many times did you receive such an injection? | One.....1 Two.....2 Three Or More.....3 Don't Know.....99 | | |

| # | QUESTIONS | RESPONSES | SKIP | ANSWER |
|-----|--|---|--------------|--------|
| 10. | Did you receive any tetanus toxoid injection at any time before that pregnancy, including during a previous pregnancy or between pregnancies? | Yes.....1 No.....2 Don't Know.....99 | → 12 → 12 | |
| 11. | Before the pregnancy with (Name), how many times did you receive a tetanus injection? | One.....1 Two.....2 Three Or More.....3 Don't Know.....99 | | |
| 12. | Who assisted with the delivery of (Name)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. | Doctor.....A Nurse.....B Midwife.....C Traditional Birth Attendant.....D Community Health Worker.....E Relative/Friend/ NeighborF No One.....G | | |
| 13. | After (Name) was born, did any health care provider or traditional birth attendant check on (Name's) health? | Yes.....1 No.....0 | → 16 | |
| 14. | How many hours, days or weeks after the birth of (Name) did the first check take place? IF LESS THAN ONE DAY, CIRCLE 0 AND RECORD HOURS; IF ONE TO SIX DAYS CIRCLE 1 AND RECORD DAYS; IF MORE THAN 6 DAYS CIRCLE 2 AND RECORD WEEKS. | Hours.....0 <input type="text"/> <input type="text"/> Days.....1 <input type="text"/> <input type="text"/> Weeks.....2 <input type="text"/> <input type="text"/> Don't Know.....99 | | |

| # | Questions | Responses | Skip | Answer |
|-----|--|--|------|--------|
| 15. | Who checked on (Name's) health at that time? Anyone else? PROBE FOR THE MOST QUALIFIED PERSON AND RECORD ALL MENTIONED. | Doctor.....A Nurse.....B Midwife.....C Traditional Birth Attendant.....D Community Health Worker.....E Relative/Friend/Neighbor.....F No One.....G | | |
| 16. | Are you currently doing something or using any method to delay or avoid getting pregnant? | YES.....1 NO.....2 | → 18 | |

| | | | | |
|-----|---|--|--|--|
| 17. | <p>Which method are you (or your husband/ partner) using?</p> <p>DO NOT READ RESPONSES. CODE ONLY ONE RESPONSE.</p> <p>IF MORE THAN ONE METHOD IS MENTIONED, ASK, What is your MAIN method that you (or your husband/ partner) use to delay or avoid getting pregnant?"</p> <p>IF RESPONDENT MENTIONS BOTH CONDOMS AND STANDARD DAYS METHOD, CODE "12" FOR STANDARD DAYS METHOD.</p> <p>IF RESPONDENT MENTIONS BREASTFEEDING, CODE "15" FOR OTHER AND RECORD BREASTFEEDING.</p> <p>IF RESPONDENT MENTIONS ABSTINENCE OR ISOLATION, CODE "15" FOR OTHER AND RECORD RESPONSE IN SPACE PROVIDED.</p> | <p>FEMALE TERILIZATION.....1</p> <p>MALE TERILIZATION.....2</p> <p>PILL.....3</p> <p>IUD.....4</p> <p>INJECTABLES.....5</p> <p>IMPLANTS.....6</p> <p>CONDOM.....7</p> <p>FEMALE CONDOM.....8</p> <p>DIAPHRAGM.....9</p> <p>FOAM/JELLY.....10</p> <p>LACTATIONAL AMEN. METHOD.....11</p> <p>STANDARD DAYS METHOD/ CYCLEBEADS.....12</p> <p>RHYTHM METHOD (OTHER THAN STANDARD DAYS).....13</p> <p>WITHDRAWAL.....14</p> <p>OTHER.....15 (SPECIFY)</p> | | |
|-----|---|--|--|--|

SECTION C: ILLNESS RECOGNITION

| | | | | |
|------------|--|--|--|--|
| <p>18.</p> | <p>Sometimes children get sick and need to receive care or treatment for illnesses. What are the signs of illness that would indicate your child needs treatment?</p> <p>RECORD ALL MENTIONED.</p> | <p>Don't Know A</p> <p>Looks Unwell Or Not Playing Normally.....B</p> <p>Not Eating Or Drinking.....C</p> <p>Lethargic Or Difficult To Wake.....D</p> <p>High Fever E</p> <p>Fast Or Difficult Breathing F</p> <p>Vomits Everything.....G</p> <p>ConvulsionsH</p> <p>Gets worse despite home care.....I</p> <p>Looks dehydrated (dry mouth or no tears)...J</p> <p>Other _____ K (Specify)</p> | | |
| <p>19.</p> | <p>Did (NAME) experience any of the following in the past two weeks?</p> <p>CIRCLE ALL THAT APPLY</p> <p>Diarrhea? Cough? Difficult breathing Fast breathing or short, quick breaths? Fever? Malaria? Convulsions?</p> <p>IF YES GO TO Q20 AND COMPLETE THE QUESTIONNAIRE, THEN AFTER GO TO APPROPRIATE ILLNESS QUESTIONNAIRE</p> | <p>Diarrhea A</p> <p>Cough B</p> <p>Difficult Breathing C</p> <p>Fast Breathing/Short, Quick Breaths D</p> <p>Fever..... E</p> <p>Malaria F</p> <p>Convulsions G</p> <p>None.....H</p> <p>Other.....I</p> | | |

| # | Questions | Responses | Skip | Answer |
|--|---|--|--------------|--------|
| SECTION D: WATER AND SANITATION | | | | |
| 20. | Do you treat your water in any way to make it safer for drinking? | Yes..... 1 No 2 | → 22 | |
| 21. | IF YES, what do you usually do to the water to make it safer to drink? (ONLY CHECK MORE THAN ONE RESPONSE, IF SEVERAL METHODS ARE USUALLY USED TOGETHER, FOR EXAMPLE, CLOTH FILTRATION AND CHLORINE) | Let It Stand And Settle/SedimentationA Strain It Through ClothB Boil.....C Add Bleach/Chlorine..... D Water Filter (Ceramic, Sand, Composite) E Solar Disinfection.....F Don't Know G Other _____ H (Specify) | | |
| 22. | <u>When do you wash your hands?</u> DO NOT PROMPT. CIRCLE ALL MENTIONED. | Never.....A Before Food Preparation.....B Before Feeding Child.....C After Defecation/Visiting The Toilet.....D After Attending To A Child Who Has Defecated/Soiled.....E Other..... F (Specify) | → 25 | |
| 23. | Can you show me where you usually wash your hands and what you use to wash hands? ASK TO SEE AND OBSERVE | Inside/Near Toilet Facility 1 Inside/Near Kitchen/Cooking Place 2 Elsewhere In Yard 3 Outside Yard..... 4 No Specific Place 5 No Permission To See..... 8 | → 25 → 25 | |
| 24. | OBSERVATION ONLY: Is there soap or detergent or locally used cleansing agent? <i>This item should be either in place or brought by the interviewee within one minute. If the item is not present within one minute check none, even if brought out later.</i> | Soap 1 Detergent..... 2 Ash..... 3 Mud/Sand 4 None 5 Other _____ 6 (Specify) | | |

| | | | | |
|-----|---|--|--|--|
| 25. | What kind of toilet facility do you have? Can I see it? | No toilet facility.....A Open latrine.....B Closed latrine.....C Flush toilet.....D No permission to see.....E | | |
|-----|---|--|--|--|

| # | Questions | Responses | Skip | Answer |
|-----|--|--|------|--------|
| 26. | The last time (name of child) passed stools, where were the feces disposed of? Probe to find the location. | Disposed into a latrine or toilet facility.....A Disposed into a garbage/trash bin.....B Disposed of somewhere near the house: Dug and buried?.....C1 Did not bury.....C2 Disposed of somewhere far from the house: Dug and buried?.....D1 Did not bury.....D2 Don't know.....E Other.....F | | |

SECTION E: MALARIA PREVENTION

| | | | | |
|-----|---|--|------------------------------|--|
| 27. | Does your household have any mosquito nets that can be used while sleeping? | Yes.....1 No.....0 | | |
| | | | → 32 | |
| 28. | Which brand of bed net do you own? <i>IF THE MOTHER CANNOT READ THE TAG ASK THE PERMISSION TO READ IT</i> | Interceptor.....A Bayer.....B Olyset.....C Permanet.....D No tagF Other kind of netF (Specify) | → 31 → 31 → 31 → 31 | |
| 29. | Was the bednet ever soaked or dipped in a liquid to repel mosquitoes or bugs? | Yes..... 1 No 2 Don't Know 8 | → 31 → 31 | |
| 30. | How long ago was the bednet last soaked or dipped? RECORD ANSWER IN MONTHS (LESS THAN 1 MONTH = 00) IF LESS THAN 2 YEARS AGO, RECORD THE NUMBER OF MONTHS. IF 12 MONTHS AGO OR 1 YEAR AGO, PROBE FOR THE EXACT NUMBER OF MONTHS. | Months <input type="text"/> <input type="text"/> More Than 2 Years Ago.....1. Don't Know 8 | | |

| | | | | |
|-----|--|--|--|--|
| 31. | <p>Who slept under a bednet last night?</p> <p>RECORD ALL MENTIONED.</p> <p>IF ANYONE OTHER THAN THE CHILD IS MENTIONED, CIRCLE "OTHER."</p> | <p>No One..... A</p> <p>Child (Name)..... B</p> <p>Myself C</p> <p>Husband/Partner..... D</p> <p>Other_____</p> <p>(Specify)</p> | | |
|-----|--|--|--|--|

| # | Questions | Responses | Skip | Answer |
|-----------------------------------|---------------------------------|--|------|--------|
| SECTION F: ANTHROPOMETRICS | | | | |
| 32. | May I weigh (name of child)? | YesA → ____ . __ Kilograms No.....B → Go to END | | |
| 33. | Copy Child age in months | | | |
| 34. | Copy Child Gender | | | |
| 35. | Nutrition Status | Good nutrition Status (>-2SD).....A Moderate Malnutrition (-2≤SD≤-3).....B Severe Malnutrition (<-3SD).....C | | |

Thank you. This is the end of the survey. We appreciate you taking the time to respond to our questions. Do you have any questions for me at this time?

INTERVIEWER COMMENTS:

Please record any comments or observations that you feel that are necessary to understand the circumstances in which you conducted this interview:

Time interview Ended _____ (Please also record this time on Page 1)

SUPERVISOR (Questionnaire reviewed) _____ (initial here)

Date _____ Time _____

0-5 MONTHS ENGLISH

Survey Questionnaire

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD LESS THAN 6 MONTHS OF AGE

FOR DATA ENTRY PERSONNEL ONLY

| | | |
|--|-------------|-------------|
| | Name | Date |
|--|-------------|-------------|

INFORMED CONSENT

Hello. My name is _____, and I am working with World Relief. We are conducting a survey and would appreciate your participation. I would like to ask you about your health and the health of your youngest child under the age of two. This information will help World Relief to plan health services and assess whether it is meeting its goals to improve children's health. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....

| | | |
|-----------------------|--|--|
| Team leader review**: | | |
| Keyed by: | | |

***Review for completion – all answers answered, skip patterns followed, etc.*

RESPONDENT IDENTIFICATION

| | | |
|-----------------------------------|--|---------------------------------------|
| Record Number | | |
| Interviewer Name | | |
| Commune | 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko | |
| Colline | | |
| Souscolline | | |
| Household # | Commune/Souscolline/HH Ex. BUK/01/1/Q1 |/...../..... |
| NAME OF THE MOTHER | | NAME OF THE CHILD LESS THAN 24 MONTHS |
| AGE OF THE MOTHER (IN YEARS)..... | | SEX OF CHILD (1=MALE, 2=FEMALE)..... |
| | | DATE OF BIRTH ____/____/____ |
| | | AGE OF THE CHILD (IN MONTHS) |
| Date of Interview | |/...../..... |
| Time interview began | | AM PM |
| Time interview ended | | AM PM |

| # | Questions | Responses | Skip | Answer |
|---|-----------|-----------|------|--------|
|---|-----------|-----------|------|--------|

SECTION A: SOCIO-DEMOGRAPHICS

INSTRUCTIONS: ASK THE QUESTIONS EXACTLY AS THEY ARE WRITTEN. DO NOT READ RESPONSES UNLESS DIRECTED TO DO SO. WORDS IN *ITALICS* ARE INSTRUCTIONS FOR THE INTERVIEWER AND SHOULD NOT BE READ ALOUD. FOLLOW SKIP PATTERNS AS DIRECTED. WRITE ANSWERS IN THE ANSWER BOX UNLESS OTHERWISE DIRECTED.

| | | | | |
|-----|--|--|--|--|
| 36. | Have you ever attended school? | Yes..... 1 No..... 0 → 3 Don't know..... 88 → 3 No response..... 99 → 3 | | |
| 37. | <i>If yes, then ask:</i> What is the highest grade or level of school you have completed? | No School..... 1 Primary..... 2 Secondary..... 3 Past Secondary 4 Other..... 5 | | |
| 38. | How many people live in your household? | Number..... ## Don't know..... 88 No response 99 | | |

| # | Questions | Responses | Skip | Answer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|------|--------|----|----|-----------------|---------|---|----|-----------------|---------|---|----|-------------|---------|---|----|-----------------|---------|---|----|--|---------|---|----|--|---------|---|----|-----------------------------------|---------|---|----|--|--|
| SECTION B: BREASTFEEDING | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 39. | How long after birth did you first put (name of child) to the breast? | Immediately/within first hour after delivery.....A Same day, After the first hour after delivery....B More than 24 hours after delivery.....C Don't know.....D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40. | Did you give anything to (name of child) before the first breastfeeding? | Yes.....A No.....B Don't know.....C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 41. | Now I would like to ask you about liquids or foods (NAME) had yesterday during the day or at night. Did (NAME) drink/eat: READ THE LIST OF LIQUIDS (A THROUGH F STARTING WITH "BREAST MILK"). | Did (name of child) drink/eat the following: <table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>A. Breast milk?</td> <td>A.....1</td> <td>0</td> <td>88</td> </tr> <tr> <td>B. Plain water?</td> <td>B.....1</td> <td>0</td> <td>88</td> </tr> <tr> <td>C. Cow Milk</td> <td>C.....1</td> <td>0</td> <td>88</td> </tr> <tr> <td>D. Banana Juice</td> <td>D.....1</td> <td>0</td> <td>88</td> </tr> <tr> <td>E. Commercially produced infant formula?</td> <td>E.....1</td> <td>0</td> <td>88</td> </tr> <tr> <td>F. Any fortified, commercially available infant and young child food (e.g. Cerelac)?</td> <td>F.....1</td> <td>0</td> <td>88</td> </tr> <tr> <td>G. Any (other) porridge or gruel?</td> <td>G.....1</td> <td>0</td> <td>88</td> </tr> </tbody> </table> | | YES | NO | DK | A. Breast milk? | A.....1 | 0 | 88 | B. Plain water? | B.....1 | 0 | 88 | C. Cow Milk | C.....1 | 0 | 88 | D. Banana Juice | D.....1 | 0 | 88 | E. Commercially produced infant formula? | E.....1 | 0 | 88 | F. Any fortified, commercially available infant and young child food (e.g. Cerelac)? | F.....1 | 0 | 88 | G. Any (other) porridge or gruel? | G.....1 | 0 | 88 | | |
| | YES | NO | DK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. Breast milk? | A.....1 | 0 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. Plain water? | B.....1 | 0 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C. Cow Milk | C.....1 | 0 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D. Banana Juice | D.....1 | 0 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E. Commercially produced infant formula? | E.....1 | 0 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F. Any fortified, commercially available infant and young child food (e.g. Cerelac)? | F.....1 | 0 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G. Any (other) porridge or gruel? | G.....1 | 0 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Thank you. This is the end of the survey. We appreciate you taking the time to respond to our questions. Do you have any questions for me at this time?

INTERVIEWER COMMENTS:

Please record any comments or observations that you feel that are necessary to understand the circumstances in which you conducted this interview:

Time interview Ended _____ (Please also record this time on Page 1)

SUPERVISOR (Questionnaire reviewed) _____ (initial here)

Date _____ Time _____

6-23 MONTHS ENGLISH

INFORMED CONSENT

Hello. My name is _____, and I am working with World Relief. We are conducting a survey and would appreciate your participation. I would like to ask you about your health and the health of your youngest child under the age of two. This information will help World Relief to plan health services and assess whether it is meeting its goals to improve children's health. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE
INTERVIEWED

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED.....

Survey Questionnaire

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD 6-23 MONTHS OF AGE

FOR DATA ENTRY PERSONNEL ONLY

| | Name | Date |
|-----------------------|-------------|-------------|
| Team leader review**: | | |
| Keyed by: | | |

***Review for completion – all answers answered, skip patterns followed, etc.*

RESPONDENT IDENTIFICATION

| | | |
|-----------------------------------|---|---------------------------------------|
| Record Number | | |
| Interviewer Name | | |
| Commune | 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko | |
| Colline | | |
| Souscolline | | |
| Household # | Commune/Souscolline/HH/Questionnaire Ex. BUK/01/1/Q1 |/...../..... |
| NAME OF THE MOTHER | | NAME OF THE CHILD LESS THAN 24 MONTHS |
| AGE OF THE MOTHER (IN YEARS)..... | | SEX OF CHILD (1=MALE, 2=FEMALE)..... |
| | | DATE OF BIRTH ____/____/____ |
| | | AGE OF THE CHILD (IN MONTHS) |
| Date of Interview | |/...../..... |
| Time interview began | | AM PM |
| Time interview ended | | AM PM |

| # | Questions | Responses | Skip | Answer |
|---|-----------|-----------|------|--------|
|---|-----------|-----------|------|--------|

SECTION A: SOCIO-DEMOGRAPHICS

INSTRUCTIONS: ASK THE QUESTIONS EXACTLY AS THEY ARE WRITTEN. DO NOT READ RESPONSES UNLESS DIRECTED TO DO SO. WORDS IN *ITALICS* ARE INSTRUCTIONS FOR THE INTERVIEWER AND SHOULD NOT BE READ ALOUD. FOLLOW SKIP PATTERNS AS DIRECTED. WRITE ANSWERS IN THE ANSWER BOX UNLESS OTHERWISE DIRECTED.

| | | | | |
|-----|---|--|-------------|--|
| 42. | Have you ever attended school? | Yes..... 1 No..... 0 → Don't know..... 88 → No response... 99 → | 3 3 3 | |
| 43. | <i>If yes, then ask:</i> What is the highest grade or level of school you have completed? | No School..... 1 Primary..... 2 Secondary..... 3 Past Secondary ... 4 Other..... 5 | | |

| | | | | | |
|-------|---|-------------------|---------|--|--|
| 44. . | How many people live in your household? | Number..... | | | |
| | | Don't know..... | 88 | | |
| | | No response | 99 | | |

| # | Questions | Responses | Skip | Answer |
|-----------------------------|-----------|-----------|------|--------|
| SECTION B: NUTRITION | | | | |

| | | | | |
|-----|--|--|--|--|
| 45. | I would like to ask you about liquids or foods (NAME) had yesterday during the day or at night. Did (NAME) drink/eat: READ THE LIST OF LIQUIDS (A THROUGH E, STARTING WITH "BREAST MILK"). | Did (name of child) drink/eat the following: | | |
| | | YES NO DK | | |
| | H. Breast milk? | A.....1 0 88 | | |
| | I. Plain water? | B.....1 0 88 | | |
| | J. Cow Milk | C.....1 0 88 | | |
| | K. Banana Juice | D.....1 0 88 | | |
| | L. Commercially produced infant formula? | E.....1 0 88 | | |
| | M. Any fortified, commercially available infant and young child food" [e.g. Cerelac]? | F.....1 0 88 | | |
| | N. Any (other) porridge or gruel? | G.....1 0 88 | | |

| | | | | |
|--|--|------------|-----------|-----------|
| 46. | <p>Now I would like to ask you about (other) liquids or foods that (NAME) may have had yesterday during the day or at night. I am interested in whether your child had the item even if it was combined with other foods.</p> <p>Did (NAME) drink/eat:</p> | | | |
| Group 1: Dairy | | YES | NO | DK |
| A. Commercially produced infant formula? | | | | |
| B. Milk such as tinned, powdered, or fresh cow milk? | | | | |
| C. Yogurt or other milk products? | | | | |
| Group 2: Grain | | YES | NO | DK |
| D. Any fortified, commercially available infant and young child food (e.g. Cerelac) | | | | |
| E. Any other porridge? | | | | |
| F. Bread, rice, maize or other foods made from grains (uburo, amasaka, ingano)? | | | | |
| G. White potatoes, white yams, cassava, or any other foods made from roots? | | | | |
| Group 3: Vitamin A Rich Vegetables | | YES | NO | DK |
| H. Squash, carrots or sweet potatoes that are yellow or orange inside? | | | | |
| I. Any dark green leafy vegetables (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)? | | | | |
| J. Ripe mangoes, papayas or tomato? | | | | |
| K. Foods made with red palm oil? | | | | |
| Group 4: Other Fruits and Vegetables | | YES | NO | DK |
| L. Any other fruits or vegetables like oranges, (ibicoco, intore), mushroom, pineapple, (amatunda), eggplant, avocado or banana? | | | | |
| Group 5: Eggs | | YES | NO | DK |
| M. Eggs? | | | | |
| GROUP 6: Meat, Poultry, Fish | | YES | NO | DK |
| N. Liver, kidney, heart or other organ meats? | | | | |
| O. Blood from cows (Ikiremve) | | | | |
| P. Any meat, such as beef, pork, goat, lamb, chicken, duck, rats, gopher, rabbit, dove or quail? | | | | |
| R. Fresh or dried fish? | | | | |
| S. Grubs, snails or insects (inswa, isenene, ubunyabobo, ibikenya, ibinyagu)? | | | | |
| GROUP 7: Legumes/Nuts | | YES | NO | DK |
| T. Any foods made from beans, peas, nuts (inkore, soja) and lentils (intengwa)? | | | | |
| GROUP 8: Oils/Fats | | YES | NO | DK |
| U. Any kinds of oils (ibiyoba, ibihoke, isoya), fats, butter, or foods made with any of these? | | | | |
| GROUP 9: Other Foods | | YES | NO | DK |
| V. Tea or coffee? | | | | |
| W. Any other liquids (such as banana juice)? _____ | | | | |
| Y. Any sugary foods, sweets, pastries, donut, biscuits, pop/soda, sugar cane, or honey? | | | | |
| Z. Any other food not mentioned? _____ | | | | |

| | | |
|-----|--|---|
| 47. | <p>How many times did (NAME) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?</p> <p>If caregiver answers seven or more times, record "7"</p> <p>Use probing questions to help the mother remember all the times the child ate yesterday.</p> <p>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 should not be counted. Liquids do not count for this question. Do not include thin soups or any other liquids.</p> | <p>A. Number of times: __ __</p> <p>B. Don't know88</p> |
|-----|--|---|

SECTION C: VITAMIN A SUPPLEMENTATION

| 48. | <p>Has (NAME) ever received a vitamin A dose (like this/any of these)?</p> <p>SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS</p> | <p>Yes 1</p> <p>No0 → Go To End</p> <p>Don't Know 88 → Go to end</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|---|--|------|-----|-------|------|--|--|--|-----------|--|--|--|--|--|--|-----------|--|--|--|--|--|--|-----------|--|--|--|--|--|--|
| 49. | <p>Did (NAME) receive a vitamin A dose within the last 6 months?</p> | <p>Yes 1</p> <p>No 0</p> <p>Don't Know 88</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50. | <p>Did you receive a card or child health booklet where (name of child's) vaccinations and Vitamin A doses can be written down? If so, can I see the card?</p> | <p>Yes, interviewer sees the card.....A</p> <p>Yes, but card is missing or lostB → Go to end</p> <p>No, never had a card.....C → Go to end</p> <p>Don't knowD → Go to end</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 51. | <p>Copy only information related to Vitamine A from the card or booklet. If Vitamine A is not recorded in the child health card or booklet, fill in 99/99/9999.</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">Day</th> <th style="width: 10%;">Month</th> <th colspan="4" style="width: 65%;">Year</th> </tr> </thead> <tbody> <tr> <td>Vitamin A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Vitamin A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Vitamin A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | Day | Month | Year | | | | Vitamin A | | | | | | | Vitamin A | | | | | | | Vitamin A | | | | | | |
| | Day | Month | Year | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vitamin A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vitamin A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vitamin A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Thank you. This is the end of the survey. We appreciate you taking the time to respond to our questions. Do you have any questions for me at this time?

INTERVIEWER COMMENTS:

Please record any comments or observations that you feel that are necessary to understand the circumstances in which you conducted this interview:

Time interview Ended _____ (Please also record this time on Page 1)

SUPERVISOR (Questionnaire reviewed) _____ (initial here)

Date _____ Time _____

MALARIA ENGLISH

Survey Questionnaire

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD LESS THAN 24 MONTHS OF AGE **EXPERIENCING FEVER IN TWO LAST WEEKS**

(Check before starting interview if the child (NAME) has been ill with fever in the last two weeks? If yes, continue interview. If no go to another household)

| FOR DATA ENTRY PERSONNEL ONLY | | |
|-------------------------------|-------------|-------------|
| | Name | Date |

| | | |
|-----------------------|--|--|
| Team leader review**: | | |
| Keyed by: | | |

**Review for completion – all answers answered, skip patterns followed, etc.

| RESPONDENT IDENTIFICATION | |
|-----------------------------------|---|
| Record Number | |
| Commune | 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko |
| Colline | |
| Souscolline | |
| Household # | Commune/Souscolline/HH Ex. BUK/01/1/...../..... |
| NAME OF THE MOTHER | NAME OF THE CHILD LESS THAN 24 MONTHS |
| AGE OF THE MOTHER (IN YEARS)..... | SEX OF CHILD (1=MALE, 2=FEMALE)..... |
| | DATE OF BIRTH ____ / ____ / ____ |
| | AGE OF THE CHILD (IN MONTHS) |
| Date of Interview |/...../..... |
| Time interview began | AM PM |
| Time interview ended | AM PM |

| # | Questions | Responses | Skip | Answer |
|---|--|--|------|--------|
| SECTION A: SOCIO-DEMOGRAPHICS | | | | |
| INSTRUCTIONS: ASK THE QUESTIONS EXACTLY AS THEY ARE WRITTEN. DO NOT READ RESPONSES UNLESS DIRECTED TO DO SO. WORDS IN <i>ITALICS</i> ARE INSTRUCTIONS FOR THE INTERVIEWER AND SHOULD NOT BE READ ALOUD. FOLLOW SKIP PATTERNS AS DIRECTED. WRITE ANSWERS IN THE ANSWER BOX UNLESS OTHERWISE DIRECTED. | | | | |
| 1. | Have you ever attended school? | Yes..... 1 0 → 3 No..... 88 → 3 99 → 3 Don't know..... No response..... .. | | |
| 2. | <i>If yes, then ask:</i> What is the highest grade or level of school you have completed? | No 1 School..... 2 Primary..... 3 4 Secondary..... 5 Past Secondary Other..... | | |
| 3. | How many people live in your household? | Number..... ## 88 Don't know..... 99 No response | | |

| # | Questions | Responses | Skip | Answer |
|---|--|---|------|--------|
| SECTION B: FEVER (SUSPECTED MALARIA) | | | | |
| 4. | Did you seek advice or treatment for (NAME'S) fever? | Yes..... 1 No.....2 —————▶ Go to end | | |
| 5. | Where did you first go for advice or treatment? ¹ | Hospital.....01 Health Center.....02 Health Post.....03 Traditional Practitioner.....04 Shop.....05 Pharmacy.....06 Friend/Relative.....07 Other _____(Specify) | | |
| 6. | How long after you noticed (NAME'S) fever did you seek treatment from that person/place? | Same Day 0 Next Day 1 Two Days 2 Three Or More Days 3 Don't Know88 | | |

| | | | | |
|----|--|---|--|--|
| 7. | Was (NAME) treated with any medicine(s)? | Yes..... 1 No.....2 → Go to end Don't Know.....88 → Go to end | | |
|----|--|---|--|--|

| | |
|---|---|
| <p>8.</p> <p>Which medicines were given to (NAME) for his/her fever?¹</p> <p>CIRCLE ALL MEDICINES THAT WERE GIVEN.</p> <p>IF MOTHER IS UNABLE TO RECALL DRUG NAME(S), ASK HER TO SHOW THE DRUG(S) TO YOU. IF SHE IS UNABLE TO SHOW YOU THEM, SHOW HER TYPICAL ANTI-MALARIALS AND HAVE HER IDENTIFY WHICH WERE GIVEN.</p> <p>FOR EACH ANTI-MALARIAL MEDICINE ASK:</p> <p>How long after the fever started did (NAME) start taking the medicine?</p> <p>CIRCLE THE APPROPRIATE CODE.</p> <p><u>CODES:</u></p> <p><i>SAME DAY = 0</i></p> <p><i>NEXT DAY AFTER THE FEVER = 1</i></p> <p><i>TWO DAYS AFTER THE FEVER = 2</i></p> <p><i>THREE OR MORE DAYS AFTER THE FEVER = 3</i></p> <p><i>DON'T KNOW=88</i></p> | <p>ANTI-MALARIAL DRUGS</p> <p>A. Amodiaquine + Artesunate....0 1 2 3 88</p> <p>B. Quinine.....0 1 2 3 88</p> <p>Other Drugs</p> <p>C. Paracetamol0 1 2 3 88</p> <p>D. Unknown Drug0 1 2 3 88</p> <p>E. Other_____ 0 1 2 3 88</p> <p style="text-align: center;">(Specify)</p> |
|---|---|

Thank you. This is the end of the survey. We appreciate you taking the time to respond to our questions. Do you have any questions for me at this time?

INTERVIEWER COMMENTS:

Please record any comments or observations that you feel that are necessary to understand the circumstances in which you conducted this interview: _____

Time interview Ended _____ (Please also record this time on Page 1)

SUPERVISOR (Questionnaire reviewed) _____ (initial here)

Date _____ Time _____

12-23 MONTHS ENGLISH

Survey Questionnaire

INFORMED CONSENT

Hello. My name is _____, and I am working with World Relief. We are conducting a survey and would appreciate your participation. I would like to ask you about your health and the health of your youngest child under the age of two. This information will help World Relief to plan health services and assess whether it is meeting its goals to improve children's health. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE
INTERVIEWED

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED.....

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD 12-23 MONTHS OF AGE

FOR DATA ENTRY PERSONNEL ONLY

| | Name | Date |
|-----------------------|------|------|
| Team leader review**: | | |
| Keyed by: | | |

**Review for completion – all answers answered, skip patterns followed, etc.

| RESPONDENT IDENTIFICATION | |
|-----------------------------------|---|
| Record Number | |
| Interviewer Name | |
| Commune | 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko |
| Colline | |
| Souscolline | |
| Household # | Commune/Souscolline/HH Ex. BUK/01/1/...../..... |
| Name Of The Mother | Name Of The Child Less Than 24 Months |
| Age Of The Mother (In Years)..... | Sex Of Child (1=MALE, 2=FEMALE) |
| | Date Of Birth ____ __/____ __/____ _ |
| | Age Of The Child (In Months)..... |
| Date of Interview |/...../..... |
| Time interview began | AM PM |

| Time interview ended | | AM | PM | | |
|---|---|---|----|------|--------|
| # | Questions | Responses | | Skip | Answer |
| SECTION A: SOCIO-DEMOGRAPHICS | | | | | |
| INSTRUCTIONS: ASK THE QUESTIONS EXACTLY AS THEY ARE WRITTEN. DO NOT READ RESPONSES UNLESS DIRECTED TO DO SO. WORDS IN <i>ITALICS</i> ARE INSTRUCTIONS FOR THE INTERVIEWER AND SHOULD NOT BE READ ALOUD. FOLLOW SKIP PATTERNS AS DIRECTED. WRITE ANSWERS IN THE ANSWER BOX UNLESS OTHERWISE DIRECTED. | | | | | |
| 1. | Have you ever attended school? | Yes..... 1 0 | | 3 | |
| | | No..... 88 99 | | 3 | |
| | | Don't know..... No response..... .. | | 3 | |
| 2. | <i>If yes, then ask:</i> What is the highest grade or level of school you have completed? | No School..... 1 Primary..... 2 3 Secondary..... 4 5 Past Secondary Other..... | | | |
| 3. | How many people live in your household? | Number..... ## 88 Don't know..... 99 No response | | | |

| | | | | |
|--|--|-------|--|--|
| | | | | |
|--|--|-------|--|--|

| # | Questions | Responses | Skip | Answer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|-------------------------|--------|----------------------|--|--|--|--|-----|-------|------|-----|--|--|--|--|--|--|--|---------|--|--|--|---------|--|--|--|---------|--|--|--|---------------|--|--|--|---------------|--|--|--|---------------|--|--|--|---------|--|--|--|
| SECTION B: IMMUNIZATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | Did you receive a card or child health booklet where (name of child's) vaccinations and Vitamin A doses can be written down? If so, can I see the card? | Yes, interviewer sees the card.....A Yes, but card is missing or lostB → No, never had a card.....C → Don't knowD → | 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | Copy the following vaccinations dates from the card or booklet. If Vaccines are not recorded in the child health card or booklet, fill in 99/99/9999. IF ALL VACCINES ARE RECORDED IN THE CHILD HEALTH CARD OR BOOKLET, GO TO END | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;">Date of Immunization</th> </tr> <tr> <th style="width: 75%;"></th> <th style="width: 8%;">DAY</th> <th style="width: 8%;">MONTH</th> <th style="width: 10%;">YEAR</th> </tr> </thead> <tbody> <tr> <td>BCG</td> <td></td> <td></td> <td></td> </tr> <tr> <td>POLIO 0 (POLIO GIVEN AT BIRTH OR BEFORE 2 WEEKS)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>POLIO 1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>POLIO 2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>POLIO 3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PENTAVALENT 1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PENTAVALENT 2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PENTAVALENT 3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Measles</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | Date of Immunization | | | | | DAY | MONTH | YEAR | BCG | | | | POLIO 0 (POLIO GIVEN AT BIRTH OR BEFORE 2 WEEKS) | | | | POLIO 1 | | | | POLIO 2 | | | | POLIO 3 | | | | PENTAVALENT 1 | | | | PENTAVALENT 2 | | | | PENTAVALENT 3 | | | | Measles | | | |
| Date of Immunization | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DAY | MONTH | YEAR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BCG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POLIO 0 (POLIO GIVEN AT BIRTH OR BEFORE 2 WEEKS) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POLIO 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POLIO 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POLIO 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PENTAVALENT 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PENTAVALENT 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PENTAVALENT 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Measles | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. | Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations given during immunization campaigns? | Yes1 No0 Don't Know 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Please tell me if (NAME) received any of the following vaccinations: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | |
|----|---|--|--|--|
| 7. | BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar? ³ | Yes 1 No 0 Don't Know 88 | | |
| 8. | Polio vaccine, that is, drops like these, in the mouth? Show the example of polio drops | Yes 1 No 0 Don't Know 88 | | |

| # | Questions | Responses | Skip | Answer |
|-----|---|---|------|--------|
| 9. | When was the first polio vaccine received? [In the first two weeks after birth or later?] | First Two Weeks After Birth 1 Later 2 Don't Know.....88 | | |
| 10. | How many times was the polio vaccine received? | Number Of Times..... <input type="checkbox"/> | | |
| 11. | PENTAVALENT vaccination, that is, an injection given in the thigh, sometimes at the same time as polio drops? | Yes 1 No 0 → Don't Know 88 | 14 | |
| 12. | How many times? | Number Of Times <input type="checkbox"/> Don't Know.....88 | | |
| 13. | Did (NAME) ever receive an injection in the arm to prevent Measles? | Yes 1 No 2 Don't Know..... 88 | | |

Thank you. This is the end of the survey. We appreciate you taking the time to respond to our questions. Do you have any questions for me at this time?

INTERVIEWER COMMENTS:

Please record any comments or observations that you feel that are necessary to understand the circumstances in which you conducted this interview: _____

Time interview Ended _____ (Please also record this time on Page 1)

SUPERVISOR (Questionnaire reviewed) _____ (initial here)

INFORMED CONSENT

Hello. My name is _____, and I am working with World Relief. We are conducting a survey and would appreciate your participation. I would like to ask you about your health and the health of your youngest child under the age of two. This information will help World Relief to plan health services and assess whether it is meeting its goals to improve children's health. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Signature of interviewer: _____ Date: _____

Date _____ Time _____

DIARRHEA ENGLISH

Survey Questionnaire

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD LESS THAN 24 MONTHS OF AGE EXPERIENCING DIARRHEA IN THE LAST TWO WEEKS

(Check before starting interview if the child (NAME) has been ill with diarrhea in the last two weeks? If yes, continue interview. If no go to another household)

RESPONDENT AGREES TO BE INTERVIEWED

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....

| FOR DATA ENTRY PERSONNEL ONLY | | |
|-------------------------------|------|------|
| | Name | Date |
| Team leader review**: | | |
| Keyed by: | | |

**Review for completion – all answers answered, skip patterns followed, etc.

| RESPONDENT IDENTIFICATION | |
|-----------------------------------|---|
| Record Number | |
| Interviewer Name | |
| Commune | 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko |
| Colline | |
| Souscolline | |
| Household # | Commune/Souscolline/HH Ex. BUK/01/1 /...../..... |
| Name Of The Mother | Name Of The Child LESS THAN 24 MONTHS |
| Age Of The Mother (In Years)..... | Sex Of Child (1=MALE, 2=FEMALE) |
| | Date Of Birth ____ / ____ / ____ |
| | Age Of The Child (In Months)..... |
| Date of Interview | |

| |/...../..... | | | |
|----------------------|-------------------|-----------|------|--------|
| Time interview began | AM | | PM | |
| Time interview ended | AM | | PM | |
| # | Questions | Responses | Skip | Answer |

SECTION A: SOCIO-DEMOGRAPHICS

INSTRUCTIONS: ASK THE QUESTIONS EXACTLY AS THEY ARE WRITTEN. DO NOT READ RESPONSES UNLESS DIRECTED TO DO SO. WORDS IN *ITALICS* ARE INSTRUCTIONS FOR THE INTERVIEWER AND SHOULD NOT BE READ ALOUD. FOLLOW SKIP PATTERNS AS DIRECTED. WRITE ANSWERS IN THE ANSWER BOX UNLESS OTHERWISE DIRECTED.

| | | | | |
|----|--|--|--|--|
| 1. | Have you ever attended school? | Yes..... 1 0 → 3 No..... 88 → 3 99 → 3 Don't know..... No response..... .. | | |
| 2. | <i>If yes, then ask:</i> What is the highest grade or level of school you have completed? | No 1 School..... 2 Primary..... 3 4 Secondary..... 5 Past Secondary Other..... | | |

| | | | | |
|----|---|--|--|--|
| 3. | How many people live in your household? | Number..... ## 88 Don't know..... 99 No response | | |
|----|---|--|--|--|

| # | Questions | Responses | Skip | Answer |
|---------------------------------------|--|---|------|--------|
| SECTION B: CONTROL OF DIARRHEA | | | | |
| 4. | When (name of child) was sick, was s/he offered more breastmilk than usual, about the same amount, or less than usual? If the child is exclusively breastfeed (only taking breastmilk), ask only this question and then skip to end. | Less than usualA → Go to end Same amountB → Go to end More than usualC → Go to end | | |
| 5. | When (NAME) had diarrhea, was he/she offered less than usual to drink, about the same amount, or more than usual to drink? | Less than usual.....A Same amount.....B. More than usual.....C | | |

| | | | | |
|----|---|---|--|--|
| 6. | When (name of child) was sick, was s/he offered more than usual to eat, about the same amount, or less than usual to eat? | Less than usual.....A Same amount.....B More than usual.....C | | |
| 7. | Was s/he given any of the following to drink at any time s/he started having diarrhea? Read the choices to the mother and circle all mentioned: | A fluid made from a special packet called (local name for ORS packet)?.....A Sugar and salt waterB Cereal based ORT (rice water, maize water).....C Medicine Probe for the kind of medicine and describe here:D | | |

Thank you. This is the end of the survey. We appreciate you taking the time to respond to our questions. Do you have any questions for me at this time?

INTERVIEWER COMMENTS:

Please record any comments or observations that you feel that are necessary to understand the circumstances in which you conducted this interview: _____

Time interview Ended _____ (Please also record this time on Page 1)

SUPERVISOR (Questionnaire reviewed) _____ (initial here)

Date _____ Time _____

PNEUMONIA ENGLISH

Survey Questionnaire

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD LESS THAN 24 MONTHS OF AGE EXPERIENCING PNEUMONIA IN THE LAST TWO WEEKS

(Check before starting interview if the child (NAME) has been ill with diarrhea in the last two weeks? If yes, continue interview. If no go to another household)

| FOR DATA ENTRY PERSONNEL ONLY | | |
|-------------------------------|------|------|
| | Name | Date |
| Team leader review**: | | |
| Keyed by: | | |

**Review for completion – all answers answered, skip patterns followed, etc.

| RESPONDENT IDENTIFICATION | |
|-----------------------------------|---|
| Record Number | |
| Interviewer Name | |
| Commune | 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko |
| Colline | |
| Souscolline | |
| Household # | Commune/Souscolline/HH Ex. BUK/01/1/...../..... |
| NAME OF THE MOTHER | NAME OF THE CHILD LESS THAN 24 MONTHS |
| AGE OF THE MOTHER (IN YEARS)..... | SEX OF CHILD (1=MALE, 2=FEMALE)..... |
| | DATE OF BIRTH ____/____/____ |
| | AGE OF THE CHILD (IN MONTHS) |
| Date of Interview |/...../..... |
| Time interview began | AM PM |
| Time interview ended | |

| | | AM | PM | | |
|---|--|---------------------|----|------|--------|
| # | Questions | Responses | | Skip | Answer |
| SECTION A: SOCIO-DEMOGRAPHICS | | | | | |
| INSTRUCTIONS: ASK THE QUESTIONS EXACTLY AS THEY ARE WRITTEN. DO NOT READ RESPONSES UNLESS DIRECTED TO DO SO. WORDS IN <i>ITALICS</i> ARE INSTRUCTIONS FOR THE INTERVIEWER AND SHOULD NOT BE READ ALOUD. FOLLOW SKIP PATTERNS AS DIRECTED. WRITE ANSWERS IN THE ANSWER BOX UNLESS OTHERWISE DIRECTED. | | | | | |
| 1. | Have you ever attended school? | Yes..... | 1 | | |
| | | | 0 | → 3 | |
| | | No..... | 88 | → 3 | |
| | | | 99 | → 3 | |
| | | Don't know..... | | | |
| | | No response..... | | | |
| | | .. | | | |
| 2. | <i>If yes, then ask:</i> What is the highest grade or level of school you have completed? | No School..... | 1 | | |
| | | Primary..... | 2 | | |
| | | | 3 | | |
| | | Secondary..... | 4 | | |
| | | | 5 | | |
| | | Past Secondary..... | | | |
| | | Other..... | | | |
| | | | | | |
| 3. | How many people live in your household? | Number..... | ## | | |
| | | | 88 | | |
| | | Don't know..... | 99 | | |
| | | No response..... | | | |
| | | | | | |

| # | Questions | Responses | Skip | Answer |
|---------------------------------------|---|--|------|--------|
| SECTION B: PNEUMONIA TREATMENT | | | | |
| 4. | 41. When (name of child) had an illness with a cough, did s/he have trouble breathing or breathe faster than usual? | Yes.....A NoB → Go to end Don't knowC→ Go to end | | |
| 5. | Did you seek advice or treatment for the cough/fast breathing? | Yes.....A No.....B → Go to end | | |
| 6. | Who gave you advice or treatment? Anyone else? Record all mentioned. | Doctor.....A Nurse.....B Community Health Worker.....C Other _____D | | |

Thank you. This is the end of the survey. We appreciate you taking the time to respond to our questions. Do you have any questions for me at this time?

INTERVIEWER COMMENTS:

Please record any comments or observations that you feel that are necessary to understand the circumstances in which you conducted this interview: _____

Time interview Ended _____ (Please also record this time on Page 1)

SUPERVISOR (Questionnaire reviewed) _____ (initial here)

Date _____ Time _____

0-5 MONTHS KIRUNDI

**IBIBAZO VYOSE BITEGEREZA KWISHURWA N'ABAVYEYI BAFISE UMWANA ARI
MUSI Y'AMEZI 6**

IBIRANGA UWISHURA

| | |
|-------------------------------|--|
| Inomero yo kwinjiza mumashini | |
|-------------------------------|--|

INTANGAMARARA

Amahoro! Jewe nitwa _____ kandi nkorana n’ishirahamwe rya Ramba Kibondo. Turiko turagira rusansuma kugira tumenye ivyerekeye amagara y’abavyeyi n’abana babo muri iyi micungararo. Twagomba tubabaze ibibazo bijanye n’amagara y’umwana wawe ari musu y’imyaka ibiri. Twabasaba rero muduhe akanya tuganire. Ibizova muriyi rusansuma bizofasha Ramba Kibondo gutegura ibijanye n’amagara meza yanyu nay’abana banyu no kwihweza ko intumbero zo guteza imbere amagara meza Ramba Kibondo yiyemeje zashitsweko. Inkuru zose uzakutubarira n’akabanga hagati yacu kandi ntawundi muntu azozimenya.

Umukono w’uwubaza: _____ Italiki: _____

| | |
|--|--|
| UWUBAZWA YEMEYE KWISHURA KUBIBAZO | UWUBAZWA YEMEYE KWISHURA KUBIBAZO |
|--|--|

| | |
|------------------|--|
| Izina ry’uwubaza | |
|------------------|--|

| | |
|-------------------------------------|---------------------------|
| Ikomine 1= Bukirasazi, 3= Itaba, | 2= Buraza, 4= Makebuko |
|-------------------------------------|---------------------------|

| | |
|---------|--|
| Umusozi | |
|---------|--|

| | |
|------------|--|
| Agacimbiri | |
|------------|--|

| | |
|--|--|
| Inomero y’urugo Commune / Souscolline / HH / Questionnaire Ex. BUK / 01 / 1 / Q1 | |
|--|--|

| | |
|-------------------------------------|---|
| Izina ry’umuvyeyi _____ _____ | Izina ry’umwana ari musu y’amezi 24 _____ _____ |
| Imyaka y’umuvyeyi | Igitsina c’umwana (1=umuhungu, 2=umukobwa)..... |
| | Italiki y’amavuko / / |

| | |
|-------------------------------|----------------------------|
| | Amezi y'umwana |
| Italiki ya rusansuma |/...../..... |
| Umwanya ibibazo bitanguriyeko | Isaha..... Iminota..... |
| Umwanya ibibazo bihereyeko | Isaha |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|---|---|--|-------|---------|
| IKIGABANE CA MBERE: IVYUMUBANO N'ABANTU | | | | |
| <i>INGINGO NGENDERWAKO: BAZA IBIBAZO UKONYENE VYANDITSE. NTUSOME INYISHU KIRETSE IYO BISABWE. AMAJAMBO YANDITSE AHENGETSE NINGINGO NGENDERWAKO ZEREKEYE UWUBAZA SIZOGUSOMERA HEJURU. SIMBA AHO BISABWA. SHIRA INYISHU MUDUSAHO ZATEGURIWE KIRETSE HARI IRINDI TEGEKO RIBIBUZA.</i> | | | | |
| 1 | Woba warigeze uja kw'ishure? | Ego..... 1 Oya..... 0 → 3 Sinzi..... 88 → 3 Ntanyishu..... 99 → 3 | | |
| 2. | NIMBA ARI EGO, BAZA: Wagarukiye | Ntashure..... 1 Amashuri matomato..... 2 | | |

| | | | | |
|------------------------------------|---|--|-------|---------|
| | muwakangahe? | Amashuri yisumbuye..... 3 Kaminuza 4 Ayandi..... 5 (DONDAGURA) | | |
| 3. | Murugo rwawe haba abantu bangahe? | Igitigiri..... Sinzi..... 88 Ntanyishu 99 | | |
| IKIGABANE CA KABIRI: KWONSA | | | | |
| 4. | Uhejeje kwibaruka watanguye kwonsa umwana wawe (<i>muvuge izina</i>) ryari? | Ubwo nyene mw'isaha yambere nibarutse..... A Isaha imwe iheze avutse niho yonka B Amasaha munani aheze avutse..... C SinziD | | |
| 5. | Harico wahaye umwana (<i>Vuga izina ryiwe</i>) imbere yuko utangura kumwonsa? | Ego.....A Oya.....B SinziC | | |
| # | Ibibazo | Inyishu | Simba | Inyishu |

| | | | |
|---|--|--|--|
| Ubu naho nagomba ndakubaze ivyerekeye ibinyobwa n'imfungurwa uyo mwana (vuga izina ry'umwana) yafashe ejo kumurango canke mw'ijoro. SOMERA UMUVYEYI URUTONDE RW'IBINYOBWA KUVA A GUSHIKA G UTANGURIYE KUMABEREBERE. | Mbega uyo mwana (vuga izina ryuyo mwana) yaranyoye canke yarafunguye ibikurikira: EGO OYA SINZI | | |
| A. Amaberebere? | A.....1 0 88 | | |
| B. Amazi? | B.....1 0 88 | | |
| C. Amata y'inka? | C.....1 0 88 | | |
| D. Umutobe? | D.....1 0 88 | | |
| E. Amata yahinguwe mugabo agurishwa? | E.....1 0 88 | | |
| F. Ibifungugwa bvahinguwe bigategurirwa inzoya? (cerelac..) | F.....1 0 88 | | |
| G. Umusururu uwariwo wose? | G.....1.....0.....88 | | |

Murakoze! Turahejeje ibibazo. Turabashimiye ko mwafashe umwanya mukatwishura kubibazo. Mwoba mufise ikibazo cokumbaza muri aka kanya?

Umwihwezo w'uwabajije:

Birasabwe ko wandika umwihwezo n'ivyiyumviro wibaza ko bikenewe kugira dutahure ivyabaye mugihe wariko urakora iyi rusansuma:

Umwanya ibibazo vyahereye _____ (Uyu mwanya wibuke uwandike kurupapuro 1)

UWAHAGARIKIYE (Ibibazo vyasuzumwe) _____ (Umukono ngaha)

Italiki _____ Umwanya _____

0-23 MONTHS KIRUNDI

**Final KPC Survey Questionnaire- LQAS Parallel Sampling
GUSUZUMA KO URUTONDE RW'IBIBAZO RWOSE RWUJUJWE
0-23 Mois**

INTANGAMARARA

Amahoro! Jewe nitwa _____ kandi nkorana n'ishirahamwe rya Ramba Kibondo. Turiko turagira rusansuma kugira tumenye ivyerekeye amagara y'abavyeyi n'abana babo muri iyi micungararo. Twagomba tubabaze ibibazo bijanye n'amagara y'umwana wawe ari musi y'imyaka ibiri. Twabasaba rero muduhe akanya tuganire. Bizova muriyi rusansuma bizofasha Ramba Kibondo gutegura ibijanye n'amagara meza yanyu nay'abana banyu no kwihweza ko intumbero zo guteza imbere amagara meza Ramba Kibondo yiyemeje zashitsweko. Inkuru zose uzakutubarira n'akabanga hagati yacu kandi ntawundi muntu azozimenya.

Umukono w'uwubaza: _____ Italiki: _____

UWUBAZWA YEMEYE KWISHURA UWUBAZWA YANSE KWISHURA
KUBIBAZO KUBIBAZO
.....

| <i>INYUMA Y'UKUBAZA BURI MUVYEYI SUZUMA KO BURI KIBAZO COSE CISHUWE</i> | Shiraho akamenyetso ✓ |
|--|--------------------------|
| 8. Urutonde rw'ibibazo bibazwa abavyeyi bafise abana bari munsi y'amezi 24 | |
| 9. Urutonde rw'ibibazo bibazwa abavyeyi bafise abana bari munsi y'amezi 6 | |
| 10. Urutonde rw'ibibazo bibazwa abavyeyi bafise abana bafise amezi 6-23 | |
| 11. Urutonde rw'ibibazo bibazwa abavyeyi bafise abana bafise amezi 12-23 | |
| 12. Urutonde rw'ibibazo bibazwa abavyeyi bafise abana barwaye Malariya , bagize ubushuhe mu mayinga abiri aheze | |
| 13. Urutonde rw'ibibazo bibazwa abavyeyi bafise abana barwaye Gucibwamo mu mayinga abiri aheze | |
| 14. Urutonde rw'ibibazo bibazwa abavyeyi bafise abana barwaye Umusonga mu mayinga abiri aheze | |

| IBIRABA UWINJIZA MUMASHINI GUSA | | |
|---------------------------------|-------|---------|
| | izina | Italiki |
| Umugenzuzi yabisuzumye**: | | |
| Uwinjiza mumashini: | | |

**Gusuzumwa ko vyaheze-ibibazo vyose vyishuwe,ivyogusimbwa vyasimbwe....

| | | | | |
|-----|---|---|--|--|
| 52. | Woba warigeze uja ku ntebe y'ishure? | Ego..... 1 Oya..... 0 → 3 Sinzi..... 88 → 3 Ntanyishu..... 99 → 3 | | |
| 53. | NIMBA ARI EGO, BAZA: Wagarukiye muwakangahe ? | Ntashure..... 1 Amashuri matomato..... 2 Amashuri yisumbuye..... 3 Kaminuza 4 Ayandi..... 5 (DONDAGURA) | | |
| 54. | Murugo rwawe haba abantu bangaha? | Igitigiri..... <input type="text"/> Sinzi..... 88 Ntanyishu..... 99 | | |

IKIGABANE CA KABIRI: UKWITWARARIKA UWUVUTSE N'UMUVYEYI

| | | | | |
|-----|--|--|--|--|
| 55. | Mugihe c'imbanyi y'uwo mwana (<i>vuga izina ry'umwana</i>) warigeze uryama mumusegetera? | Ego.....1 Oya.....0 → 6 Sinzi.....88 → 6 Ntanyishu.....9 → 6 9 | | |
| 56. | Mugihe c'imbanyi y'uwo mwana (<i>vuga izina</i>) waryama mu musegetera igihe cose, kenshi, rimwe rimwe canke gake? | Igihe coseA KenshiB Rimwe rimweC Gake.....D | | |

| | | | | |
|----------|--|--|---------------------------|----------------|
| 57. | Mugihe c'imbanyi y'uwo mwana (<i>vuga izina</i>), woba waragiye gusuzumisha imbanyi imbere yuko uvyara? | Ego.....1 Oya.....0 Sinzi.....88 Ntanyishu.....99 | → 10 → 10 → 10 | |
| 58. | Mugihe c'imbanyi y'uwo mwana (<i>vuga izina</i>), watanguye kwipimisha imbanyi ifise amezi angahe? | Amezi..... <input type="text"/> Sinzi.....99 | | |
| # | Ibibazo | Inyishu | Simba | Inyishu |
| 59. | Mugihe c'imbanyi yuwo mwana (<i>vuga izina ry'umwana</i>) warigeze uhabwa urucanco batera kukuboko rukingira umwana tetanusi iseruka mukudadarara kw'umwana yavutse? | Ego.....1 Oya.....0 Sinzi.....99 | → 10 → 10 | |
| 60. | Igihe wari ufise imbanyi yuwo mwana (muvuge izina) waronse urwo rucanco rwa tetanusi kangahe? | Rimwe.....1 Kabiri.....2 Gatatu canke kenshi.....3 Sinzi.....99 | | |

| | | | | |
|--|---|---|--------------|----------------|
| 61. | Mbega warigeze uterwa urucanco rukiringira Tetanusi igihe icarico cose imbere yuko wibungenga, ushizemwo kuzindi mbanyi canke hagati y'imbanyi? | Ego.....1 Oya.....0 Sinzi.....99 | → 12 → 12 | |
| 62. | Imbere yimbanyi yuwo mwana (<i>Izina</i>) mbega wazitewe kangahe? | Rimwe.....1 Kabiri.....2 Gatatu canke kenshi.....3 Sinzi.....99 | | |
| # | Ibibazo | Inyishu | Simba | Inyishu |
| 63. | Mugihe co kwibaruka uwo mwana (vuga izina ryuwo mwana) Ninde yakwakiriye? BAZA NEZA UKORESHEJE IBIBAZO BIDASHOKA BITANGA INYISHU, USHIRE AKANZINGI KUBAVUZWE BOSE. | DogiteriA Umuforoma/umuforoma.....B Umwakirizi wo kwamuganga.....C Umwakirizi wo mu kirundiD AbaremeshakiyagoE Incuti/Umugenzi/UmubanyiF Ntanumwe (umuvyeyi yari wenyene)..... G | | |
| <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: fit-content; margin: 0 auto;"> <p>MUGIHE UWISHUYE AVUZE KO ATANUMWE YAMWAKIRIYE, ONGERA UMUSOBANUZE NEZA KUGIRA NGO UMENYE KO HOBA HARI UMUNTU AKUZE IGIHE</p> </div> | | | | |

| | | | | |
|-----|---|---|------|--|
| 64. | Mbega uhejeje kwibaruka hoba hariho umuntu yasuzumye amagara yawe nay'umwana (<i>muvuge izina</i>)? | Ego.....1 Oya.....0 | → 16 | |
| 65. | Haciye amasaha angahe, imisi ingahe canke indwi zingahe imbere yuko umwana asuzumwa? ARI MUSI YUMUSI UMWE, SHIRA AKAZINGI KURI 0 UCE WANDIKA AMASAHA; ARI UMUSI 1 GUSHIKA KUMISI 6 SHIRA AKAZINGI KURI 1 UCE WANDIKA IMINSI; ARI IMISI IRENGA 6 SHIRA AKAZINGI KURI 2 UCE WANDIKA AMAYINGA. | Amasaha 0 <input type="checkbox"/> <input type="checkbox"/> Iminsi..... 1 <input type="checkbox"/> <input type="checkbox"/> Amayinga2 <input type="checkbox"/> <input type="checkbox"/> Sinzi.....99 | | |

| | | | | |
|-----|--|--|-------------|--|
| 66. | <p>Nibande basuzumye amagara y'uwo mwana (muvuge izina) muri ico gihe?</p> <p>MUSOBANUZE NEZA HANYUMA, WANDIKE INYISHU KUBAVUZWE BOSE</p> | <p>DogiteriA</p> <p>Umuforoma/umuforomakazi.....B</p> <p>Umwakirizi wo kwamuganga.....C</p> <p>Umwakirizi wo mu kirundiD</p> <p>AbaremeshakiyagoE</p> <p>Incuti/Umugenzi/Umubany....F</p> <p>Ntanumwe (umuvyeyi yari wenyene)..... G</p> | | |
| 67. | <p>Hoba hariho ico ukora canke uburyo ukoresha kugirango utandukanye imvyaro canke utinde gusama imbanyi utifuza</p> | <p>Ego1</p> <p>Oya.....2</p> | <p>→ 18</p> | |

| | | | | |
|-----|--|---|--|--|
| 68. | <p>Ni ubuhe buryo (canke umugabo akoresha) mukoresha?</p> <p>NTUSOME INYISHU ANDIKA INYISHU IMWE GUSA.</p> <p>MU GIHE UBURYO BURENZE BUMWE BAZA NEZA IKUNDA GUKORESHWA CANE, BAZA ,</p> <p>NIMBA AVUZE AGAFUKO HAMWE NO GUHARURA IMINSI SHIRA KURI"12".</p> <p>NIMBA UVUZE 'UKWONSA' AKONGEREZAK O IBINDI ANDIKA"15" USIGURE 1. 2. 3. NIMBA AVUZE KWIGUMYA AKONGEREZAK O IBINDI ANDIKA KURI "15".USIGURE 4.</p> | <p>Gufunga uturingoti tw'umukenyezi.....1</p> <p>Gufunga uturingoti tw'umugabo.....2</p> <p>Ibinini bamira3</p> <p>Akanyuzi4</p> <p>Urushinge5</p> <p>Utugegene6</p> <p>Agafuko k'abagabo.....7</p> <p>Agafuko k'umukenyezi8</p> <p>Ikinini bacisha mu bihimba vy'irondoka..... 10</p> <p>Ukwonsa11</p> <p>Uguharura iminsi yo kuja mu kwezi.....12</p> <p>Ubundi buryo kiretse guharura (gusuzuma ingene uruzi rumeze /igipimo c'ubushuhe).....13</p> <p>Gusohora hasi imbuto z'umugabo.....14</p> <p>Ubundi buryo.....15</p> <p>(Sigura)</p> | | |
|-----|--|---|--|--|

| # | Ibibazo | Inyishu | Simba | Inyishu |
|---|---|--|-------|---------|
| IKIGABANE CA GATATU: KUMENYA INDWARA | | | | |
| 69. | <p>Hariho ibihe umwana agwara maze agakenera kuvurwa. N'ibihe bimenyetso bikwerekana ko umwana wawe akeneye kuvurwa?</p> <p>ANDIKA IBIVUZWE VYOSE.</p> | <p>Sinzi.....A</p> <p>Igihe asa nkuwugwaye kandi adashobora gukina neza.....B</p> <p>Igihe atariko ararya, anywa, canke yonka.....C</p> <p>Arushe canke bigoye kwavyukaD</p> <p>Afise ubushuhe bwinshi.....E</p> <p>Ahemagurika canke vyanka ko ahema.....F</p> <p>Adahwa igihe cose.....G</p> <p>Igihe umwana adadarayeH</p> <p>Aguma aremba naho yitwararitswe cane i muhiraI</p> <p>Asa nkuwatakaje amazi muri we (umunwa wumye canke atamosozi).....J</p> <p>IBINDIK</p> <p>(DONDAGURA)</p> | | |

| | | | | |
|-----|---|--|--|--|
| 70. | <p>Mbega uyo mwana (<i>Izina</i>) yoba yaragize ibimenyetso (indwara) ngira ndakubwire mumayinga abiri aheze?</p> <p>SHIRA AKAZINGI KUNYISHU IBEREYE</p> <p>Gucibwamwo? Gukorora? Guhema bigorana</p> <p>Guhemagurika? Ubushuhe? Malariya? Kudadarara?</p> <p>INYISHU ARI EGO JA KUKIBAZO CA 20 UHEZE IBIBAZO HANYUMA UCE UJA KUBWOKO BWINDWARA BUJANYE</p> | <p>Gucibwamwo.....A</p> <p>Gukorora B</p> <p>Guhema bigorana..... C</p> <p>Guhemagurika.....D</p> <p>Ubushuhe E</p> <p>Malaria.....F</p> <p>KudadararaG</p> <p>Nta na kimwe.....H</p> <p>IbindiI</p> | | |
|-----|---|--|--|--|

| # | Ibibazo | Inyishu | Simba | Inyishu |
|--|--|---|-------|---------|
| IKIGABANE CA KANE:AMAZI N'ISUKU | | | | |
| 71. | Hariho isuku ugirira amazi yo kunywa kugirango abe meza? | <p>Ego 1</p> <p>Oya..... 0 → 20</p> | | |

| | | | | |
|-----|---|--|------|--|
| 72. | <p>Nimba inyishu ari ego, mbega none ukorera ibiki amazi kugira ngo abe meza ashobore kunyobwa?</p> <p>SHIRA UTUZINGI KU NYISHU ZOSE ZIVUZWE,NIM BA HAKORESHA UBURYO BURENZE BUMWE,NKAK ARORERO KUYAMIMINA UKORESHEJE AGAHUZU NUMUTI USUKURA AMAZI</p> | <p>Kurindira amazi atonganuke/ yirekeA</p> <p>Kuyayungurura ukoresheje agahuzu/ kuyamimina B</p> <p>Amazi yabize/ guteka amazi..... C</p> <p>Gushiramwo umuti (Sur'Eau)/chloreD</p> <p>Akayungiro k'amazi (umusenyi....).... E</p> <p>Kwica imigera mumazi ukoresheje imishwarara yizubaF</p> <p>Sinzi G</p> <p>Ibindi _____ H</p> <p style="text-align: center;">(DONDAGURA)</p> | | |
| 73. | <p>Niryari ukaraba iminwe yawe?</p> <p>NUBAZE UDATANGA INYISHU. CA AKAZINGI MUSI YIBIDONDAGU WE.</p> | <p>Ntanarimwe.....A</p> <p>Ngomba ntangure gutekaB</p> <p>Ngomba ngaburire umwana.....C</p> <p>Mpejeje kwitumaD</p> <p>Mpejeje kwoza umwana yitumye.....E</p> <p>Ibindi _____ F</p> | → 25 | |

| | | | | |
|-----|--|--|----------|--|
| 74. | Urashobora kunyereka aho wama ukarabiramo ukarabiramwo? NUSABE AHAKWEREKE MAZE UHAGENZURE. | Hafi yakazu ka sugumwe.....1 Hafi yigikoni2 Kumbuga3 Kure yo kumbuga.....4 Ntanahamwe hama hateguwe.....5 → Ntaruhusha ruriho rwokuhabona.....8 → | 25 25 | |
| 75. | UMWIHWEZO GUSA: Hoba hariho isabuni, canke ikintu cose gikoreshwa mu kugira isuku? | Isabuni.....1 Omo2 Umunyota.....3 Ivu/ umusenyi.....4 Ntakihari.....5 Ibindi6 (DONDAGURA) <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;"> <p>IKI GIKORESHO GITEGEREZWA KUZANWA UBWONYENE MU MUNOTA UMWE</p> </div> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;"> <p>NA NYENE KUBAZWA CANKE HEREKANWE AHO KIRI. KITAZANYWE UBWO NYENE CANKE KIZANYWE MUNYUMA SHIRA AKAZINGI KURI "NTAKOMFISE."</p> </div> | | |
| 76. | Akazu kasugumwe mufise kameze gute? Ndashobora kukabona? | NtakodufiseA NtigafundikiyeB KarafundikiyeC NakikizunguD Ntaruhusha ufise rwokukarabaE | | |

| | | | | |
|--|--|---|----------------------|--|
| 77. | Igihe umwana (vuga izina ry'umwana) aheruka kwituma washize hehe umwanda wiwe? BAZA NEZA KUGIRANGO UMENYE AHO BAWUSHIZE. | Twawutaye mwiwese.....A Twawutaye aho duta umwavuB <u>Twawushize iruhande y'inzu:</u> Narawimbiye ndawufurira?.....C1 Canke sinawimbiyeC2 <u>Twawushize kure y'inzu:</u> Narawimbiye ndawufurira?.....D1 Canke sinawimbiyeD2 Sinzi.....E AhandiF (DONDAGURA) | | |
| IKIGABANE CAGATANU: KWIRINDA MALARIYA | | | | |
| 78. | Mbega urugo rwawe rwoba rutunze imisegetera ishobora gukoreshwa mugihe abantu baryanye? | Ego.....1 Oya.....0 → | 32 | |
| 79. | Soma izina ryanditse kuri uwo musegetera | Interceptor.....A → Bayer.....B → Olyset.....C → Permanet.....D → Nta canditsekoF Irindi zinaF (Sigura) | 31 31 31 31 | |
| 80. | Mbega uwo musegetera woba warabombetsw e mu muti wirukana imibu n'ibihere? | Ego.....1 Oya.....2 → Sinzi.....88 → | 31 31 | |

| | | | | |
|--|---|--|--|--|
| 81. | <p>Mbega uwo musegetera umaze igihe kingana gute utabombetswe mu muti wirukana imibu n'ibihere?</p> | <p>Amezi..... <input type="text"/> <input type="text"/></p> <p>Imyaka irenze ibiri.....1</p> <p>Sinzi.....88</p> | | |
| <p><i>NIMBA ARI MUSI Y'UKWEZI KUMWE GUHEZE, ANDIKA AMEZI 00.</i></p> <p><i>NIMBA ARI MUSI Y'AMEZI 2 AHEZE, ANDIKA IGITIGIRI C'UKWEZI.</i></p> <p><i>NIMBA ARI AMEZI 12 AHEZE CANKE IIMWAKA IHFZE RAZA IRIBAZO</i></p> | | | | |

| | | | | |
|--|---|---|--|--|
| 82. | Nibande baryamye mumusegetera n'ijoro? NIMBA HARI UWUNDI MUNTU AVUZWE ATARI UMWANA, SHIRA AKAZINGI KU "ABANDI". | Ntanumwe..... A Umwana (izina).....B Jewe nyeneC Umugabo/uwotwubakanye.....D Abandi_____E (DONDAGURA) | | |
| IKIGABANE C'INDWI: GUPIMA UBUREMERE | | | | |
| 83. | Ndashobora gupima uburemere bwuwo mwana (Muvuge izina)? | Ego.....A → ____ . __ Kilos Oya.....B → Heza ibibazo | | |
| 84. | <i>Andika imyaka y'umwana mumezi</i> | ---.--- | | |
| 85. | <i>Andika igitsina c'umwana</i> | Umuhungu.....1 Umukobwa.....2 | | |
| 86. | <i>Imero nkomoka ngaburo y'umwana</i> HUZUZA N'UMUGENZU ZI GUSA | Imero nziza ($> -2SD$)A Imero mbi Atari cane ($-2 \leq SD \leq -3$)B Imero mbi cane ($< -3SD$)C | | |

Murakoze! Turahejeje ibibazo. Turabashimiye ko mwafashe umwana mukatwishura kubibazo. Mwoba mufise ikibazo co kumbaza kijyanye n'ibyo duhejeje kuvuga muri aka kanya?

UMWIHWEZO W'UWABAJIJE:

Birasabwe ko wandika umwihwezo n'ivyiyumviro wibaza ko bikenewe kugira dutahure ivyabaye mugihe wariko urakora iyi rusansuma:

ONGERA URABE IKIBAZO CA 19 NIMBA UMWANA YARARWAYE UMUSONGA, UBUSHUHE, MALARIA, GUCIBWAMO UCE UFATA URUTONDE RW'IBIBAZO RUJANYE N'IZO NDWARA.

Umwanya ibibazo vyahereye _____ (Uyu mwanya wibuke uwandike kurupapuro 2)

UWAHAGARIKIYE (Ibibazo vyasuzumwe) _____ (Umukono ngaha)

Italiki _____ Umwanya _____

6-23 MONTHS KIRUNDI

IBIBAZO VYOSE BITEGEREZA KWISHURWA N'ABAVYEYI BAFISE UMWANA AFISE AMEZI 6 KUGEZA KURI 23

INTANGAMARARA

Amahoro! Jewe nitwa _____ kandi nkorana n'ishirahamwe rya Ramba Kibondo. Turiko turagira rusansuma kugira tumenye ivyerekeye amagara y'abavyeyi n'abana babo muri iyi micungararo. Twagomba tubabaze ibibazo bijanye n'amagara y'umwana wawe ari musu y'imyaka ibiri. Twabasaba rero muduhe akanya tunganire. Ibizova muriyi rusansuma bizofasha Ramba Kibondo gutegura ibijanye n'amagara meza yanyu nay'abana banyu no kwihweza ko intumbero zo guteza imbere amagara meza Ramba Kibondo yiyemeje zashitsweko. Inkuru zose uzakutubarira n'akabanga hagati yacu kandi ntawundi muntu azozimenya.

Umukono w'uwubaza: _____ Italiki: _____

UWUBAZWA YEMEYE KWISHURA UWUBAZWA YEMEYE KWISHURA
KUBIBAZO KUBIBAZO

IBIRANGA UWISHURA

Inomero yo kwinjiza mumashini

| | |
|--|--|
| Izina ry'uwubaza | |
| Ikomine 1= Bukirasazi, 3= Itaba, | 2= Buraza, 4= Makebuko |
| Umusozi | |
| Agacimbiri | |
| Inomero y'urugo Commune / Souscolline / HH / Questionnaire Ex. BUK / 01 / 1 / Q1 | |
| Izina ry'umuvyeyi _____ | Izina ry'umwana ari musi y'amezi 24 _____ |
| Imyaka y'umuvyeyi | Igitsina c'umwana (1=umuhungu, 2=umukobwa): Iitaliki y'amavuko / / Amezi y'umwana |
| Italiki ya rusansuma |/...../..... |
| Umwanya ibibazo bitanguriyeko | Isaha..... Iminota..... |
| Umwanya ibibazo bihereyeko | Isaha Iminota..... |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|---|------------------------------|--------------------------|-------|---------|
| IKIGABANE CA MBERE: IVYUMUBANO N'ABANTU | | | | |
| <i>INGINGO NGENDERWAKO: BAZA IBIBAZO UKONYENE VYANDITSE. NTUSOME INYISHU KIRETSE IYO BISABWE. AMAJAMBO YANDITSE AHENGETSE NINGINGO NGENDERWAKO ZEREKEYE UWUBAZA SIZOGUSOMERA HEJURU. SIMBA AHO BISABWA. SHIRA INYISHU MUDUSAHO ZATEGURIWE KIRETSE HARI IRINDI TEGEKO RIBIBUZA.</i> | | | | |
| 1. | Woba warigeze uja kw'ishure? | Ego..... 1 Oya..... 0 | → | 3 |

| | | | | |
|--|---|----------------------|--|--|
| | D. Umutobe? | D.....1.....0.....88 | | |
| | E. Amata yahinguwe mugabo agurishwa? | E.....1.....0.....88 | | |
| | F. Ibindi bifungugwa byahinguwe bigategurirwa inzoya? | F.....1.....0.....88 | | |
| | G. Umusururu uwariwo wose? | G.....1.....0.....88 | | |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|----|---|--------------------------|-------|---------|
| 5. | <p>Ubu nagomba ndakubaze ivyerekeye (ibindi) binyobwa n'imfungurwa uyo mwana (<i>muvuge izina</i>) yoba yarafashe ejo kumurango canke mw'ijoro. Nkeneye kumenya ko uwo mwana yaronse ico kintu naho vyoba vyari bivanze n'ibindi vyokurya.</p> <p>SOMERA UMUVYEYI URUTONDE RW'IBINYOBWA UCE USHIRA AKAMENYETSO MU KIBANZA C'INYISHU ITANZWE.</p> <p>Mbega (<i>vuga izina ryuyo mwana</i>) yaranyoye canke yarafunguye ibyo ngira nkubwire?</p> | | | |
| | Umurwi | Ego Oya Sinzi | | |
| | Umurwi wa 1: Ibikomoka ku mata (Dairy) | | | |
| | A. Amata yateguwe, akorwa kugira agurigwe umwana? | A1.....0.....88 | | |
| | B. Amata ari mumagopo, y'ifu (Nido) canke amata y'inka? | B1.....0.....88 | | |
| | C. Ikivuguto, canke ibiva mu mata bindi? | C1.....0.....88 | | |
| | Umurwi wa 2: Ibinyantete (Grain) | | | |
| | D. Imfungurwa zose zateguriwe, zigahingurirwa inzoya n'abana (akarorero: Serelake)? | D1.....0.....88 | | |
| | E. Umusururu (ubuyi)? | E1.....0.....88 | | |
| | F. Umukate, umuceri, ibigori canke izindi mfungurwa zakozwe mu ntete (uburo, amasaka, ingano)? | F1.....0.....88 | | |

| | | | | |
|---|---|-----------------------|-------|---------|
| | G. Ibiraya (vyera imbere), Ibire (ibisunzu) canke amateke (vyera imbere), inumpu, umwumbati canke ibindi biterwa twamura imizi yavyo? | G1.....0.....88 | | |
| | Umurwi wa 3: Ibifungugwa bifite ubutunzi muri Vitamine A (Vitamin A Rich Vegetables) | | | |
| | H. Umwungu, amakaroti, ibijumpu bisa n'umuhondo canke bisa nk'imbere mumucungwe? | H1.....0.....88 | | |
| | I. Imbogaboga zibabi zisa n'urwatsi rutoto (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)? | I.....1.....0.....88 | | |
| | J. Imyembe ihiye, I papayi canke itomate? | J.....1.....0.....88 | | |
| | K. Ibifungurwa vyarunzwe amamesa? | K.....1.....0.....88 | | |
| # | Ibibazo | Inyishu | Simba | Inyishu |
| | Umurwi wa 4: Ibindi byamwa n'izindi mboga (Other Fruits and Vegetables) | | | |
| | L. Ibindi vyamwa canke imboga nk'imicungwa, ibicoco, intore, ibizinu, inanasi, amatunda, ibitore vy'ikizungu amavoka, igitoke? | L.....1.....0.....98 | | |
| | Umurwi wa 5: Amagi (Eggs) | | | |
| | M. Amagi? | M.....1.....0.....88 | | |
| | Umurwi wa 6: Ubwoko butandukanye bw'inyama n'amafi (Meat, Poultry, Fish) | | | |
| | N. Amahaha, igitigu, umutima canke inyama zo munda? | N.....1.....0.....88 | | |
| | O. Ikiremve | O.....1.....0.....88 | | |
| | P. Inyama yose nk'inka, ingurube, impene, intama, inkoko canke imbata, imbeba, ifuku, inkwavu, inuma, inkware? | P.....1.....0.....88 | | |
| | R. Ifi zumye canke mbisi? | R.....1.....0.....88 | | |
| | S. Inswa, isenene, ubunyabobo, ibikenya, ibinyagu? | S.....1.....0.....88 | | |
| | Umurwi wa 7: Imboga n'ibindi byera imikerera (Legumes/Nuts) | | | |

| | | | | |
|----|---|----------------------|---------------------------------------|--|
| | T. Indya zose zivuye mu biharage, ubwishaza, ivyema, inkore n'izindi ntete, I soja, intengwa? | T.....1.....0.....88 | | |
| | Umurwi wa 8: Amavuta y'ubwoko bwose (Oils/Fats) | | | |
| | U. Amavuta y'ubwoko bwose, y'inka (amasoro), amavuta y'ibiyoba, y'ibihoke, y'isoya, ibinure, n'indya zose zavuye muri ayo mavuta? | U.....1.....0.....88 | | |
| | Umurwi wa 9: Izindi mfungunwa (Other foods) | | | |
| | V. Icyi canke ikawa? | V.....1.....0.....88 | | |
| | W. Ibindi binyobwa vyose (nk'amake)? _____ | | | |
| | Y. Ibifungurwa vyose bifise isukari, imbombo, ibisuguti, ibitumbura, ifanta, imisigati, ubuki? | K.....1.....0.....88 | | |
| | Z. Izindi mfungurwa zitavuzwe? _____ | | | |
| 6. | Ejo wagaburiye umwana kangahe agahaga? (nimfungurwa zitandukanye n'ibinyobwa canke ivyo bamusemuriye)? Baza neza ukoresheje ibibazo bidashoka bitanga inyishu kugirango uwishura ashobore kwibuka ibihe vyose umwana yaraye ariye. Tugomba kumenya incuro uko zingana umwana yariye ibikwiye agahaga. Imfungurwa umwana yagiye ahabwa aruko bamubegeyeko agasemura gato ntizirimwo. Ntimushiremwo umufa wivyokurya muriki kibazo canke ibindi binyobwa vyose. | | A. Incuro zingaha: --- B. Sinzi | |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|--|--|---|--------|--------------|
| IKIGABANE CA 3: KWONGERA VITAMINE A | | | | |
| 7. | Mbega uyu mwana (<i>vuga izina ryiwe</i>) yoba yararonse vitamine A (imeze nk'iyi ngira ndakwereke)? MWEREKE AKANINI KA VITAMINE A | Ego.....1 Oya0 Sinzi8 | → → | HEZA HEZA |
| 8. | Mbega uyu mwana (<i>vuga izina ryiwe</i>) yoba yararonse vitamine A muraya mezi 6 aheze? | Ego1 Oya0 Sinzi88 | | |

| 9. | <p>Woba wararonse ikaye canke ikarata ivuga ivy'amagara meza y'umwana (vuga izina ry'umwana) aho yagiye acandagishirizwa naho yaronkeye Vitamine A bikaba vyaranditswe? Ni mba uyifise, urashobora kuyinyereka?</p> | <p>Ego, uwubaza narabe iyo karata.....A</p> <p>Ego, mugabo ikarata yaratakaye, narayibuzeB →</p> <p>Oya, sinigeze ndonka ikarata.....C →</p> <p>SinziD →</p> | <p>HEZA</p> <p>HEZA</p> <p>HEZA</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|--|---|-------------------------------------|-------|--------|--------|--|--------|--|--|-----------|--|--|--|--|--|--|--|-----------|--|--|--|--|--|--|--|-----------|--|--|--|--|--|--|--|--|--|
| 10 | <p>Andika inkuru zijanye na Vitamine A nkuko vyanditswe mwikarata canke agakaye.</p> | <table border="1"> <thead> <tr> <th></th> <th colspan="2">Umusi</th> <th colspan="2">Ukwezi</th> <th colspan="3">Umwaka</th> </tr> </thead> <tbody> <tr> <td>Vitamin A</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Vitamin A</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Vitamin A</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin-top: 20px;"> <p><i>Nimba inkuru za Vitamine A zerekeye umwana <u>zitanditswe mugakaye canke mwikarata, andika 99/99/9999.</u></i></p> </div> | | Umusi | | Ukwezi | | Umwaka | | | Vitamin A | | | | | | | | Vitamin A | | | | | | | | Vitamin A | | | | | | | | | |
| | Umusi | | Ukwezi | | Umwaka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vitamin A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vitamin A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vitamin A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Murakoze! Turaheje ibibazo. Turabashimiye ko mwafashe umwana mukatwishura kubibazo. Mwoba mufise ikibazo cokumbaza muri aka kanya?

Umwihwezo w'uwabajije:

Birasabwe ko wandika umwihwezo n'ivyiyumviro wibaza ko bikenewe kugira dutahure ivyabaye mugihe wariko urakora iyi rusansuma:

Umwanya ibibazo vyahereye _____ (Uyu mwanya wibuke uwandike kurupapuro 1)

UWAHAGARIKIYE (Ibibazo vyasuzumwe) _____ (Umukono ngaha)

Italiki _____ Umwanya _____

12-23 MONTHS KIRUNDI

IBIBAZO VYOSE BITEGEREZA KWISHURWA N'ABAVYEYI BAFISE UMWANA AFISE AMEZI 12-23

INTANGAMARARA

Amahoro! Jewe nitwa _____ kandi nkorana n'ishirahamwe rya Ramba Kibondo. Turiko turagira rusansuma kugira tumenye ivyerekeye amagara y'abavyeyi n'abana babo muri iyi micungararo. Twagomba tubabaze ibibazo bijanye n'amagara y'umwana wawe ari musi y'imyaka ibiri. Twabasaba rero muduhe akanya tunganire. Ibizova muriyi rusansuma bizofasha Ramba Kibondo gutegura ibijanye n'amagara meza yanyu nay'abana banyu no kwihweza ko intumbero zo guteza imbere amagara meza Ramba Kibondo yiyemeje zashitsweko. Inkuru zose uzakutubarira n'akabanga hagati yacu kandi ntawundi muntu azozimenya.

Umukono w'uwubaza: _____ Italiki: _____

UWUBAZWA YEMEYE KWISHURA

UWUBAZWA YANSE KWISHURA

KUBIBAZO KUBIBAZO

.....

IBIRANGA UWISHURA

Inomero yo kwinjiza mumashini

Izina ry'uwubaza

Ikomine 1= Bukirasazi, 2= Buraza,

| | | |
|--|---|--|
| 3= Itaba, | 4= Makebuko | |
| Umusozi | | |
| Agacimbiri | | |
| Inomero y'urugo Commune / Souscolline / HH / Questionnaire Ex. BUK / 01 / 1 / Q1 | | |
| Izina ry'umuvyeyi _____ | Izina ry'umwana ari musu y'amezi 24 _____ | |
| Imyaka y'umuvyeyi | Igitsina c'umwana (1=umuhungu, 2=umukobwa): <input type="checkbox"/> | |
| | Iitaliki y'amavuko / / | |
| | Amezi y'umwana | |
| Iitaliki ya rusansuma |/...../..... | |
| Umwanya ibibazo bitanguriyeko | Isaha..... Iminota..... | |
| Umwanya ibibazo biherereye | Isaha Iminota..... | |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|---|------------------------------|------------|-------|---------|
| IKIGABANE CA MBERE: IVYUMUBANO N'ABANTU | | | | |
| <i>INGINGO NGENDERWAKO: BAZA IBIBAZO UKONYENE VYANDITSE. NTUSOME INYISHU KIRETSE IYO BISABWE. AMAJAMBO YANDITSE AHENGETSE NINGINGO NGENDERWAKO ZEREKEYE UWUBAZA SIZOGUSOMERA HEJURU. SIMBA AHO BISABWA. SHIRA INYISHU MUDUSAHO ZATEGURIWE KIRETSE HARI IRINDI TEGEKO RIBIBUZA.</i> | | | | |
| 1. | Woba warigeze uja kw'ishure? | Ego..... 1 | | |
| | | Oya..... 0 | → | 3 |

| | | | | |
|----------------------------------|---|---|-------------------|--|
| | | Sinzi..... 88 → 3 | | |
| | | Ntanyishu..... 99 → 3 | | |
| 2. | NIMBA ARI EGO, BAZA: Wagarukiye muwakangahe? | Ntashure..... 1 Amashuri matomato..... 2 3 Amashuri yisumbuye..... 4 Kaminuza 5 Ayandi..... (DONDAGURA) | | |
| 3. | Murugo rwawe haba abantu bangaha? | Igitigiri..... Sinzi..... 88 Ntanyishu 99 | | |
| IKIGABANE CA 2: INCANDAGO | | | | |
| 4. | Woba wararonse ikaye canke ikarata ivuga ivy'amagara meza y'umwana (vuga izina ry'umwana) aho yagiye acandagishirizwa bikaba vyaranditswe? Ni mba uyifise, urashobora kuyinyereka? | Ego, uwubaza narabe iyo karata.....A Ego, mugabo ikarata yaratakaye, narayibuzeB Oya, sinigeze ndonka ikarata.....C SinziD | → 7 → 7 → 7 | |

| | | | | | | | | | | | | | |
|----|--|---|--------|--|--|---------|--|--------------|--------|--|---------|--|--|
| 5. | Andika amatariki yo gucandagishirizwamwo wimure bivuye mwikaye canke ikarata ya BCG, PENTA 1,2,3,(DTC/HIB) Polio 1,2,3 | Amatariki y'incandago | | | | | | | | | | | |
| | | | UMU SI | | | UKW EZI | | | UMWAKA | | | | |
| | | BCG (Urucanco rw'igituntu) | | | | | | | | | | | |
| | | POLIO 0 (Urucanco rw'ubukangwe rutangwa kumusi wukuvuka canke imbere y'indwi zibiri) | | | | | | | | | | | |
| | | POLIO 1 (Urucanco rw'ubukangwe) | | | | | | | | | | | |
| | | POLIO 2 (Urucanco rw'ubukangwe) | | | | | | | | | | | |
| | | POLIO 3 (Urucanco rw'ubukangwe) | | | | | | | | | | | |
| | | PENTA 1/DTC1/HIB | | | | | | | | | | | |
| | | PENTA 2/DTC2/HIB | | | | | | | | | | | |
| | | PENTA 3/DTC3/HIB | | | | | | | | | | | |
| | Agasama (Urucanco rw'agasama) | | | | | | | | | | | | |
| # | Ibibazo | Inyishu | | | | | | Simba | | | Inyishu | | |
| 6. | Umwana (muvuge izina) yoba yararonse incanco zitigeze zandikwa muri iyo karata, ushizemwo incanco yaronse mugihe c'isekeza y'ugucandaga? | Ego1 Oya.....2 Sinzi.....88 | | | | | | | | | | | |
| | <i>Nutubarire nimba (vuga izina ry'umwana) yararonse incandago ngira ndakubaze naho rwoba ari rumwe.</i> | | | | | | | | | | | | |
| 7. | Mbega uyo mwana (muvuge izina) yoba yararonse urucanco rwitwa BCG rukingira igituntu rukaba ruterwa kukuboko rugasiga inkovu? ³ | Ego1 Oya.....2 Sinzi.....88 | | | | | | | | | | | |
| 8. | Mbega umwana (vuga izina) yoba yararonse urucanco rukingira ubukangwe rukaba rutangwa nkamama basuka mu kanwa? <i>Erekana akarorero kayo mama akingira ubukangwe</i> | Ego1 Oya.....2 Sinzi.....88 | | | | | | → 11 → 11 | | | | | |
| 9. | Niryari uyo mwana yaronse urucanco rwambere rukingira ubukangwe? Mumayinga abiri avutse canke munyuma?] | Mumayinga abiri yambere avutse.....1 Munyuma.....2 Sinzi.....3 | | | | | | | | | | | |

| | | | | |
|-----|--|---|--------------|--|
| 10. | Yaronse urucanco rukingira ubukangwe kangahe? | Incuro zingahe..... <input type="text"/> Sinzi..... 88 | | |
| 11. | Uyo mwana wawe yoba yararonse incanco (urushinge batera kubibero) bagaca batanga uwo mwanya nyene incanco y'ubukangwe (batanga nk'ima mu kanwa)? | Ego1 Oya.....2 Sinzi.....88 | → 13 → 13 | |
| 12. | Kangahe? | Incuro zingahe..... <input type="text"/> Sinzi.....88 | | |
| 13. | Uyo mwana yoba yaratewe inshinge ituma yirinda agasama? | Ego1 Oya.....2 Sinzi.....88 | | |

Murakoze! Turahejeje ibibazo. Turabashimiye ko mwafashe umwanya mukatwishura kubibazo. Mwoba mufise ikibazo cokumbaza muri aka kanya?

Umwihwezo w'uwabajije:

Birasabwe ko wandika umwihwezo n'ivyiyumviro wibaza ko bikenewe kugira dutahure ivyabaye mugihe wariko urakora iyi rusansuma:

Umwanya ibibazo vyahereye _____ (Uyu mwanya wibuke uwandike kurupapuro 1)

UWAHAGARIKIYE (Ibibazo vyasuzumwe) _____ (Umukono ngaha)

Italiki _____ Umwanya _____

DIARRHEA/GUCIBWAMO KIRUNDI

IBIBAZO VYOSE BITEGEREZA KWISHURWA N'ABAVYEYI BAFISE UMWANA ARI MUSI Y'AMEZI 24 YAGWAYE INDWARA YO GUCIBWAMO MU MAYINGA ABIRI AHEZE

| | |
|-------------------------------|----------------------------|
| | Amezi y'umwana |
| Italiki ya rusansuma |/...../..... |
| Umwanya ibibazo bitanguriyeko | Isaha..... Iminota..... |
| Umwanya ibibazo bihereyeko | Isaha |
| | Iminota..... |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|---|--|--|---------------------|---------|
| IKIGABANE CA MBERE: IVYUMUBANO N'ABANTU | | | | |
| <i>INGINGO NGENDERWAKO: BAZA IBIBAZO UKONYENE VYANDITSE. NTUSOME INYISHU KIRETSE IYO BISABWE. AMAJAMBO YANDITSE AHENGETSE NINGINGO NGENDERWAKO ZEREKEYE UWUBAZA SIZOGUSOMERA HEJURU. SIMBA AHO BISABWA. SHIRA INYISHU MUDUSAHO ZATEGURIWE KIRETSE HARI IRINDI TEGEKO RIBIBUZA.</i> | | | | |
| | Woba warigeze uja kw'ishure? | Ego.....1 Oya.....0 Sinzi.....88 Ntanyishu.....99 | → 3 → 3 → 3 | |
| | NIMBA ARI EGO, BAZA: Wagarukiye muwakangahe? | Ntashure..... Amashuri matomato..... Amashuri yisumbuye..... | 1 2 3 | |

| | | | | |
|--|---|-------------------------------------|--|--|
| | | Kaminuza 4 | | |
| | | Ayandi..... 5 (DONDAGURA) | | |
| Murugo rwawe haba abantu bangahe? | Igitigiri..... | | | |
| | Sinzi..... | 88 | | |
| | Ntanyishu | 99 | | |
| IKIGABANE CA 2: UKUGWANYA UGUCIBWAQMWO | | | | |
| Igihe uyo mwana (<i>muvuge izina</i>) yari arwaye yoba yonkejwe kuruta uko vyahora, canke yarongereje, canke yaragabanije? | Musi yuko vyahora → HEZA Angana nuko vyahora → HEZA Aruta uko vyahora → HEZA | | | |
| NIMBA UMWANA ARIKO YONSWA ATAKINDI AFUNGURA (ATARI UKWONKA), NUBAZE IKI KIBAZO GUSA UCE UHEZA. | | | | |
| Igihe uyo mwana (<i>muvuge izina</i>) yari arwaye, yoba yahawe ibinyobwa ivyarivyo vyose bike kurusha uko vyahora, canke bingana nuko vyahora canke biruta uko vyahora? | Musi yuko vyahora.....A Bingana nuko vyahora.....B Biruta uko vyahora.....C | | | |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|----|---|---|-------|---------|
| 6. | Igihe uyo mwana yari arwaye, yoba yaragaburiwe imfungurwa kuruta uko vyahora, canke zingana nuko vyahora canke ziri musi yuko vyahora? | Musi yuko vyahora.....A Bingana nuko vyahora.....B Biruta uko vyahora.....C | | |
| 7. | Yoba yarahawe kimwe mubyo ngiye kukubwira kugira ngo anywe umwanya uwariwo wose atanguye gucibwamwo? SOMERA UMUVYEYI IBIDONDAGUWE AHO MUSI: | Ivyunyunyu vyatanzwe kwamuganga?.....A Amazi arimwo umunyu n'isukariB Ibinyobwa bifasha uwucibwamwo (amazi y'umuceri, amazi y'ibigori)C BAZA UDATANGA INYISHU UYO MUVYEYI KUGIRA UMENYE IMITI YOBA YARAHawe MURICO GIHE KANDI USIGURE UBWOKO BWAYO :D _____ _____ | | |

Murakoze! Turahejeje ibibazo. Turabashimiye ko mwafashe umwanya mukatwishura kubibazo. Mwoba mufise ikibazo cokumbaza muri aka kanya?

Umwihwezo w'uwabajije:

Birasabwe ko wandika umwihwezo n'ivyiyumviro wibaza ko bikenewe kugira dutahure ivyabaye mugihe wariko urakora iyi rusansuma:

Umwanya ibibazo vyahereye _____ (Uyu mwanya wibuke uwandike kurupapuro 1)

UWAHAGARIKIYE (Ibibazo vyasuzumwe) _____ (Umukono ngaha)

Italiki _____ Umwanya _____

MALARIA KIRUNDI

IBIBAZO VYOSE BITEGEREZWA KWISHURWA N'ABAVYEYI BAFISE UMWANA ARI MUSI Y'AMEZI 24 WRWAYE MALARIYA MU MAYINGA ABIRI AHEZE

INTANGAMARARA

Amahoro! Jewe nitwa _____ kandi nkorana n'ishirahamwe rya Ramba Kibondo. Turiko turagira rusansuma kugira tumenye ivyerekeye amagara y'abavyeyi n'abana babo muri iyi micungararo. Twagomba tubabaze ibibazo bijanye n'amagara y'umwana wawe ari musi y'imyaka ibiri. Twabasaba rero muduhe akanya tuganire. Ibizova muriyi rusansuma bizofasha Ramba Kibondo gutegura ibijanye n'amagara meza yanyu nay'abana banyu no kwihweza ko intumbero zo guteza imbere amagara meza Ramba Kibondo yiyemeje zashitsweko. Inkuru zose uzakutubarira n'akabanga hagati yacu kandi ntawundi muntu azozimenya.

Umukono w'uwubaza: _____ Italiki: _____

UWUBAZWA YEMEYE KWISHURA
KUBIBAZO

UWUBAZWA YANSE KWISHURA
KUBIBAZO

IBIRANGA UWISHURA

| | |
|--|--|
| Inomero yo kwinjiza mumashini | |
| Izina ry'uwubaza | |
| Ikomine 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko | |
| Umusozi | |
| Agacimbiri | |
| Inomero y'urugo | |

| | |
|---|---|
| Commune / Souscolline / HH / Questionnaire Ex. BUK / 01 / 1 / Q1 | |
| Izina ry'umuvyeyi _____ | Izina ry'umwana ari musu y'amezi 24 _____ |
| Imyaka y'umuvyeyi | Igitsina c'umwana (1=umuhungu, 2=umukobwa)..... Iitaliki y'amavuko / / Amezi y'umwana/...../..... |
| Italiki ya rusansuma |/...../..... |
| Umwanya ibibazo bitanguriyeko | Isaha..... Iminota..... |
| Umwanya ibibazo bihereyeko | Isaha Iminota..... |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|---|---|--|-------|---------|
| IKIGABANE CA MBERE: IVYUMUBANO N'ABANTU | | | | |
| <i>INGINGO NGENDERWAKO: BAZA IBIBAZO UKONYENE VYANDITSE. NTUSOME INYISHU KIRETSE IYO BISABWE. AMAJAMBO YANDITSE AHENGETSE NINGINGO NGENDERWAKO ZEREKEYE UWUBAZA SIZOGUSOMERA HEJURU. SIMBA AHO BISABWA. SHIRA INYISHU MUDUSAHO ZATEGURIWE KIRETSE HARI IRINDI TEGEKO RIBIBUZA.</i> | | | | |
| 1 | Woba warigeze uja kw'ishure? | Ego..... 1 Oya..... 0 Sinzi..... 88 Ntanyishu..... 99 | | |
| 2. | NIMBA ARI EGO, BAZA: Wagarukiye | Ntashure..... 1 Amashuri matomato..... 2 | | |

| | | | | |
|--|---|--|--|--|
| | muwakangahe? | Amashuri yisumbuye..... 3 Kaminuza 4 Ayandi..... 5 (DONDAGURA) | | |
| 3. | Murugo rwawe haba abantu bangahe? | Igitigiri..... ... Sinzi..... 88 Ntanyishu 99 | | |
| IKIGABANE CA KABIRI: UBUSHUHE BURENZE (MALARIYA YIKETSWE) | | | | |
| | Mbega uyo mwana (<i>Izina</i>) yoba yaragize Ubushyuhe bwinshi cane canke Malariya mumayinga abiri aheze? | Ego.....1 Oya.....0 | | |
| 4. | Woba waramuvuje canke wararondeye impanuro kubera ubwo bushuhe burenze? | Ego..... 1 Oya 0 | | |

| | | | | |
|----|---|---|-----------|-------------|
| 5. | Waciye utwara umwana hehe kugirango uronke impanuro canke kuvurwa? ¹ | Nta na hamwe.....1 Ibitaro 2 Ivuriro 3 Aho bavurira handi..... 4 Umuvugusi..... 5 Kwibutike 6 Aho badandariza imiti..... 7 Incuti/abagenzi8 Ahandi _____ (DONDAGURA) | | |
| # | Ibibazo | Inyishu | Simb a | Inyish u |
| 6. | Kuva atanguye gushuha, wamujanye Kuvugwa canke warondeye impanuro haciye imisi ingahe? | Uyo musu nyene.....0 Umusi ukurikira.....1 Mumisi ibiri.....2 Mumisi itatu canke irenga.....3 Sinzi.....88 | | |
| 7. | Mbega mugihe cokugwara umwana (<i>vuga izina ryiwe</i>) yoba yarafashe Imiti yo kugabanya ubushuhe? | Ego 1 Oya.....2 → HEZA Sinzi.....88 → HEZA | | |

| | | | | |
|--|--|---|--|--|
| <p>8. Ni iyihe miti yafashe yo kugabanya ubushuhe?¹</p> <p>SHIRA AKAZINGI KUMITI YATANZWE.</p> | <p>IMITI IIVURA MALARIYA</p> <p>A. AMODIAQUINE + Artesunate.. 0 1 2 3 88</p> <p>B. QUININE.....0 1 2 3 88</p> <p>IYINDI MITI :</p> <p>C. PARACETAMOL.....0 1 2 3 88</p> <p>D. IBININI BITAMENYWE.....0 1 2 3 88</p> <p>E. IYINDI _____ 0 1 2 3 88</p> <p>(IDONDAGURE)</p> | <p>UBWO BWOKO BW'IMITI BUTAMENYWE, EREKANA AKARORERO K'UMUTI UVURA MARARIYA.</p> <p>UMUVYEYI ADASHOBOYE KUMENYA UMUTI, MUBAZE AKWEREKE IYO MITI.</p> <p>ADASHOBOYE KUYIKWEREKA, MWEREKE AKARORERO KAYO NAWA YEMEZE IYISA NIYO YAHAWA</p> <p>KUMUTI WOSE YAFASHE BAZA:</p> | | |
| | | <p>ANDIKA IBINTU VYOSE BIDONDAGUWE.</p> <p>NUBAZE KUGIRA NGO UMENYE YUKO UBWO BWOKO BW'IMITI IZWI. UBWO BWOKO BW'IMITI BUTAMENYWE, EREKANA AKARORERO K'UMUTI URWANYA MARARIYA.</p> | | |
| | | <p><u>INYISHU MU MPFUNYAPFUNYO:</u></p> <p>UWO MUSI NYENE = 0</p> <p>UMUSI UKURIKIRA = 1</p> <p>IMISI IRIRI IKI IRIKIRA = ?</p> | | |

Murakoze! Turahejeje ibibazo. Turabashimiye ko mwafashe umwanya mukatwishura kubibazo. Mwoba mufise ikibazo cokumbaza muri aka kanya?

Umwihwezo w'uwabajije:

Birasabwe ko wandika umwihwezo n'ivyiyumviro wibaza ko bikenewe kugira dutahure ivyabaye mugihe wariko urakora iyi rusansuma:

Umwanya ibibazo vyahereye _____ (Uyu mwanya wibuke uwandike kurupapuro 1)

UWAHAGARIKIYE (Ibibazo vyasuzumwe) _____ (Umukono ngaha)

Italiki _____ Umwanya _____

PNEUMONIA KIRUNDI

Pneumonia-UMUSONGA

IBIBAZO VYOSE BITEGEREZWA KWISHURWA N'ABAVYEYI BAFISE UMWANA ARI MUSI Y'AMEZI 24 WGIZE INDWARA Y'UMUSONGA MU MAYINGA ABIRI AHEZE

INTANGAMARARA

Amahoro! Jewe nitwa _____ kandi nkorana n'ishirahamwe rya Ramba Kibondo. Turiko turagira rusansuma kugira tumenye ivyerekeye amagara y'abavyeyi n'abana babo muri iyi micungararo. Twagomba tubabaze ibibazo bijanye n'amagara y'umwana wawe ari musi y'imyaka ibiri. Twabasaba rero muduhe akanya tunganire. Ibizova muriyi rusansuma bizofasha Ramba Kibondo gutegura ibijanye n'amagara meza yanyu nay'abana banyu no kwihweza ko intumbero zo guteza imbere amagara meza Ramba Kibondo yiyemeje zashitsweko. Inkuru zose uzakutubarira n'akabanga hagati yacu kandi ntawundi muntu azozimenya.

Umukono w'uwubaza: _____ Italiki: _____

UWUBAZWA YEMEYE KWISHURA UWUBAZWA YANSE KWISHURA
KUBIBAZO KUBIBAZO
.....

IBIRANGA UWISHURA

Inomero yo kwinjiza mumashini

| | |
|--|--|
| Izina ry'uwubaza | |
| Ikomine 1= Bukirasazi, 2= Buraza, 3= Itaba, 4= Makebuko | |
| Umusozi | |
| Agacimbiri | |
| Inomero y'urugo Commune / Souscolline / HH / Questionnaire Ex. BUK / 01 / 1 / Q1 | |
| Izina ry'umuvyeyi _____ | Izina ry'umwana ari musu y'amezi 24 _____ |
| Imyaka y'umuvyeyi | Igitsina c'umwana (1=umuhungu, 2=umukobwa)..... |
| | Iitaliki y'amavuko / / Amezi y'umwana |
| Iitaliki ya rusansuma |/...../..... |
| Umwanya ibibazo bitanguriyeko | Isaha..... Iminota..... |
| Umwanya ibibazo bihereyeko | Isaha Iminota..... |

| # | Ibibazo | Inyishu | Simba | Inyishu |
|---|------------------------------|----------------|-------|---------|
| IKIGABANE CA MBERE: IVYUMUBANO N'ABANTU | | | | |
| <i>INGINGO NGENDERWAKO: BAZA IBIBAZO UKONYENE VYANDITSE. NTUSOME INYISHU KIRETSE IYO BISABWE. AMAJAMBO YANDITSE AHENGETSE NINGINGO NGENDERWAKO ZEREKEYE UWUBAZA SIZOGUSOMERA HEJURU. SIMBA AHO BISABWA. SHIRA INYISHU MUDUSAHO ZATEGURIWE KIRETSE HARI IRINDI TEGEKO RIBIBUZA.</i> | | | | |
| | Woba warigeze uja kw'ishure? | Ego..... 1 | | |
| | | Oya..... 0 → 3 | | |

| | | | | | | |
|---|--|-------------------------|-----|---|-------------|--|
| | | Sinzi..... | 88 | → | 3 | |
| | | Ntanyishu..... | 99 | → | 3 | |
| | NIMBA ARI EGO, BAZA: | Ntashure..... | 1 | | | |
| | Wagarukiye muwakangahe? | Amashuri matomato..... | 2 | | | |
| | | Amashuri yisumbuye..... | 3 | | | |
| | | Kaminuza | 4 | | | |
| | | Ayandi..... | 5 | | | |
| | | (DONDAGURA) | | | | |
| | MURUGO RWAWE HABA ABANTU BANGAHE? | Igitigiri..... | ... | | | |
| | | Sinzi..... | 88 | | | |
| | | Ntanyishu | 99 | | | |
| IKIGABANE CA KABIRI: KUVURA UMUSONGA | | | | | | |
| | Igihe (<i>vuga izina ry'umwana</i>) yagira indwara yo gukorora, mbega yaragize ingorane zo guhemagurika adashikana? | Ego.....A | | | | |
| | | OyaB | | → | HEZA | |
| | | SinziC | | → | HEZA | |
| | Woba waramuvuje canke ukaronka impanuro kugirango ngo umwana avugwe iyo nkorora n'uguhemagurika? | Ego.....A | | | | |
| | | Oya.....B | | → | HEZA | |

| | | | | |
|--|---|---|--|--|
| | <p>Ninde yaguhanuye canke yavuye umwana wawe (<i>vuga izina</i>)? Ntawundi?</p> <p>ANDIKA IBIVUZWE VYOSE</p> | <p>Dogiteri.....A</p> <p>Umuforoma/ umuforomakazi.....B</p> <p>AbaremeshakiyagoC</p> <p>Abandi_____</p> | | |
|--|---|---|--|--|

Murakoze! Turaheje ibibazo. Turabashimiye ko mwafashe umwanya mukatwishura kubibazo. Mwoba mufise ikibazo cokumbaza muri aka kanya?

Umwihwezo w'uwabajije:

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Umwanya ibibazo vyahereye _____ (Uyu mwanya wibuke uwandike kurupapuro 1)

UWAHAGARIKIYE (Ibibazo vyasuzumwe) _____ (Umukono ngaha)

Italiki _____ Umwanya _____