WORLD RELIEF

Burundi Child Survival Mid-term Evaluation

Program Location: Kibuye Health District, Gitega Province, Burundi

Cooperative Agreement #: GHN-A-00-07-00011-00

Program Dates: September 30, 2007 – September 30, 2012

Date of report re-submission: October 28, 2011

Paulette Chaponniere, PhD, MPH, BSN, BA, External Evaluation Consultant
Melanie Morrow, Director of MCH Programs, World Relief
Melene Kabadege, MCH Regional Technical Advisor, World Relief
Francois Niyitegeka, CSP Manager, World Relief Burundi

Others involved in writing/editing this report:
Olga Wollinka, Maternal and Child Health Specialist
Rachel Hower, Maternal and Child Health Specialist

TABLE OF CONTENTS

ACRONYMS **4**

A. EXECUTIVE SUMMARY **7**

TABLE 1: SUMMARY OF MAJOR PROJECT ACCOMPLISHMENTS **10**

B. OVERVIEW OF THE PROJECT **13**

C. DATA QUALITY: STRENGTHS AND LIMITATIONS **14**

D. ASSESSMENT OF PROGRESS TOWARD THE ACHIEVEMENT OF PROJECT RESULTS **15**

E. DISCUSSION OF THE PROGRESS TOWARD ACHIEVING RESULTS AND CONTRIBUTION TOWARD OBJECTIVES/RESULTS **24**

Contextual Factors 25
Role of Key Partners 27
Overall Design Factors That Are Influencing Progress Toward Results 28

F. DISCUSSION OF POTENTIAL FOR SUSTAINED OUTCOMES, CONTRIBUTION TO SCALE, EQUITY, COMMUNITY HEALTH WORKER MODELS, AND GLOBAL LEARNING **28**

Progress Toward Sustained Outcomes 28
Contribution to replication or scale up 30
Attention to Equity 31
Role of Community Health Workers 31

G. CONCLUSIONS AND RECOMMENDATIONS **31**

H. THE ACTION PLAN FOR RESPONDING TO EVALUATOR RECOMMENDATIONS **32**

ANNEXES

Annex 1: Results Highlights, 31
Annex 2: List of publications and presentations related to project, 32
Annex 3: Project Management Evaluation, 33
Annex 4: Work Plan Table, 34
Annex 5: Rapid Catch Table, 47
Annex 6: Midterm KPC Report, 48
Annex 7: CHW Training Matrix, 221

Annex 8: Evaluation Team Members and Their Titles, 222
Annex 9: Evaluation Assessment Methodology, 223
Annex 10: List of Persons Interviewed and Contacted during the Mid-Term Evaluation, 227
Annex 11: Project Data Form, 229
Annex 12: Special Reports: none, 240
Annex 13: Major themes from Qualitative Data, 241
Annex 14: Recommendations by Category, 244
Annex 15: Work Schedule, 249

ACRONYMS

ACT	Artesunate Combined Treatment
ADRA	Adventist Development and Relief Agency International
AFASS	Acceptable Feasible Affordable Sustainable Safe
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARI	Acute Respiratory Infection
ARM	African Revival Ministries
BCC	Behavior Change Communication
BF	Breastfeeding
BMI	Body Mass Index
BPS	Provincial Health Bureau (*Bureau Provincial de Santé*)
CAM	HC user fee waiver card (*Carte d'assurance de maladie*)
CBO	Community-Based Organization
CCM	Community Case Management
CDC	Centers for Disease Control
CDD	Control of Diarrheal Disease
CG	Care Group
C-HIS	Community Health Information System
CHW	Community Health Worker
C-IMCI	Community-IMCI
CNLS	National AIDS Control Program
COGES	HC drug management committee (*Comité de Gestion*)
COSA	HC staff management committee (*Comité de Santé*)
CS	Child Survival
CSHGP	Child Survival & Health Grants Program
CSP	Child Survival Project
CV	Curriculum Vitae
DANIDA	Danish International Development Agency
DFID	Department For International Development
DGLV	Dark Green Leafy Vegetables
DHMT	District Health Management Team
DIP	Detailed Implementation Plan
DPT	Diptheria, Pertusis and Tetanus immunization
EBF	Exclusive Breastfeeding
ENA	Essential Nutrition Actions
EPI	Expanded Program on Immunization
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
FMC	Free Methodist Church
FP	Family Planning
FVS	Families Conquering AIDS (*Famille pour Vaincre la SIDA*)
FY	Fiscal Year
GAVI	Global Alliance for Vaccines and Immunizations

GDP	Gross Domestic Product
HBM	Home-Based Management of Fever (suspected malaria)
HC	Health Center
HH	Household
HIV	Human Immunodeficiency Virus
HN-TPO	Health Net-Transcultural Psychosocial Organization
HQ	Headquarters
IEC	Information, Education, and Communication
IDP	Internally Displaced Persons
IFA	Iron Folic Acid
IFRC	International Federation of Red Cross Societies
IMC	International Medical Corps
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
IPT	Intermittent Preventive Treatment
IPTp	Intermittent Preventive Treatment in Pregnancy
IRC	International Rescue Committee
ITN	Insecticide Treated Net
IUD	Intra-Uterine Device
KHD	Kibuye Health District
LLITNs	Long-Lasting Insecticide-treated Nets
LMTC	*Lutte Contre Les Maladies Tramissible et Carantieles*
LQAS	Lot Quality Assurance Sampling
MCH	Maternal Child Health
MICS	Multiple Indicators Cluster Survey
MIPAREC	Ministry for Peace and Reconciliation Under the Cross CBO
MMR	Measles, Mumps, Rubella Immunization
MOH	Ministry of Health
MTE	Mid-Term Evaluation
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
OVC	Orphans and Vulnerable Children
PADCO	Planning and Development Collaborative
PBF	Performance-based Financing
PD/Hearth	Positive Deviance/Hearth
PDI	Positive Deviance Inquiry
PEV	French acronym for Expanded Program on Immunization
PLWA	Person Living With HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission of HIV
PNDS	National Health Plan (*Plan National de Développement Sanitaire*)
PNSR	National Reproductive Health Program (*Programme National Santé de la Reproduction*)
POU	Point-of-Use Water Treatment
PPH	Postpartum Hemorrhage
PSI	Population Services International

PVO	Private Voluntary Organization
RFA	Request for Applications
SO	Strategic Objective
SP	Sulfadoxine-Pyrimethamine
STI	Sexually Transmitted Infection
TB	Tuberculosis
TBA	Traditional Birth Attendant
TH	Traditional Healer
TPS	Health Promotion Technician
TT	Tetanus Toxoid
TRM	Technical Reference Materials
U5	Under five years-old
U5MR	Under-Five Mortality Rate
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Educational Fund
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing for HIV/AIDS
VST	Vestergaard Frandsen
VST	Vocational Skills Training
WHO	World Health Organization
WR	World Relief
WRA	Women of Reproductive Age

A. EXECUTIVE SUMMARY

Project Description: The *Ramba Kibondo* –Live Long Child" Child Survival Project (CSP) is managed by World Relief (WR) in Burundi in Kibuye Health District in Gitega Province. 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. WR has implemented a Community-Integrated Management of Childhood Illness (C-IMCI) program, using the Care Group (CG) Model to mobilize communities and bring about change via dissemination of health education messages, referring families in a timely manner to the nearest Ministry of Health (MOH) health center and rehabilitation of malnourished children using the Hearth approach.

Main Accomplishments: The Care Group Model has been implemented in the entire Kibuye Health District, and the rehabilitation of malnourished children through the Hearth strategy has been effective. A total of 189 Care Groups with 1895 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 (M&E) system has provided necessary data for decision-making. The integration of Community Health Workers (CHWs), MOH health center staff and health promoters in project activities has laid the foundation for sustainability of outcomes. It must be noted that other sectors also have contributed to these accomplishments, especially MOH personnel re: vaccination campaigns.

Primary constraints, problems, areas for attention: Several contextual factors in addition to staff turnover will hinder the success of this project unless addressed.

Regarding sustainability, the current MOH strategy of performance-based salaries, while intending to improve performance and the quality of programs, may hinder the integration of this project. Currently, only one performance indicator at the community level (i.e., latrines) is used to determine the performance of Health Promotion Technicians (TPS). No other indicator, such as access to safe 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. This lack of incentive 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 residual impact of the conflict remains especially in the belief that outside agencies should be providing goods to families. This dependency mentality was noticeable in remarks made during all focus group sessions as well as in interviews be they with CG volunteers, community members or MOH staff.

Access to care and referrals to health centers have improved. MOH has not yet determined whether zinc will be included in Community Case Management (CCM). MOH is planning to roll out CCM for malaria but only with those NGO partners who have their own supply of and drugs and rapid test kits. USAID/Burundi is only supplying drugs to support activities in the area to be implemented by its own grantee. Concern Worldwide is also expected to be part of this first phase of implementation because it has

a private donor to cover the cost of these supplies. The current system for Oral Rehydration Solution (ORS) packet distribution has decreased access as families are now referred to health centers and CG volunteers are no longer distributing packets. Even though long-lasting insecticide treated nets (LLITN) have been distributed and coverage has improved, many families have not received bed-nets due to stock-outs.

WR staff turnover has been an on-going challenge. Two project managers resigned. A third candidate participated in the MTE and subsequently was hired. This provided him the opportunity to observe first hand field activities and to meet key MOH and WR personnel. As of this writing (October 2010), the WR country director has also resigned.

Conclusions and key recommendations: The project design has been effective per available quantitative and qualitative data at midterm. There has been an increase in key indicators since baseline data collection, 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; more families have LLITNs and have used them in the weeks prior to the KPC survey and mothers recognized at least two signs that indicate need to seek care for their sick child. Vaccination results varied according to the source of information: coverage has exceeded project targets when based on mother's recall though not as evidenced by card, most likely due to lack of card retention. Feeding practices were mixed: Immediate breastfeeding after birth improved and malnourished children who participated in PD/Hearth responded well. However, Feeding practices for children with diarrhea declined since baseline.

The midterm evaluation (MTE) team recommends that access to potable water be added as a personnel performance indicator in the national health system for TPS, and that NGO project coordination and monitoring be added to district, provincial and national performance indicators. The team also recommends that CHWs continue to be included not only in data collection but also in training and supervision meetings to harmonize behavior change messaging with CG volunteers. In addition, CSP staff will need to continue to work with MOH HIS personnel in analyzing data and coordinating program activities. It is strongly recommended that this project's vision and strategies be reviewed with MOH personnel at all levels so that the focus on health promotion, preventive care and use of local resources is more clearly understood. WR/Burundi and other NGOs involved in CSPs need to explore strategies to improve access to ORS packets at *colline* level, increase LLITN availability and promote CCM for malaria and zinc for diarrhea.

Strategies to discourage the dependency attitude and to encourage the on-going activities of CG volunteers could include income generating activities, whether in cooperative gardens or small animal husbandry. If the inclusion of project coordination and monitoring as MOH performance criteria is not foreseeable, negotiate with other NGOs so that a unified approach can be implemented in partnering with MOH personnel.

The CSP activities could be strengthened by training supervisors and health promoters in participatory teaching strategies and group dynamics, and by creating IEC materials, such as story boards or flash cards to be used in small group settings. CSP supervisory staff need to be trained in personnel performance evaluation. In addition, it is recommended

that the CSP salary structure be reviewed and aligned with other NGOs. Hire someone who has training and material development expertise to provide technical assistance to WR programs through the Baltimore office. Additional recommendations in the areas of program activities, human resources, training, supervision, partnerships and data collection are described in Annex 14.

TABLE 1: SUMMARY OF MAJOR PROJECT ACCOMPLISHMENTS

Table 1: Summary of Major Project Accomplishments			
Project Objective #1: Improve Linkages between households, communities and the formal health system			
Inputs	**Activities**	**Outputs**	**Projected Outcome**
Trainers IEC materials Logistical support Supervision	1.1 Integrate the project C-HIS with the MOH HIS to improve disease surveillance and the quality of local health information. 1.2 Invite MOH staff to participate in promoter training workshops for child survival project interventions. 1.3 Mobilize families to participate in antenatal care, MCH weeks, EPI outreach, routine immunizations and child health services through a network of Care Group promoters and volunteers. 1.4 Increase referrals and counter-referrals between volunteers, CHWs and health centers	1.2 CG volunteers have been collecting data since August 2008 which is then collated by the health promoters and analyzed with the HC staff. 1.2 MOH staff from the provincial and district levels have been involved in several training activities, including nutrition, immunizations, malaria and Vitamin A. 1.3 CG volunteers and health promoters have participated in several MCH outreach activities. HC staff have reported that antenatal and post-natal visits have increased. 1.4 CG volunteers have referred pregnant women to the HC as well as ill children for care, and the number of women who deliver at home has been halved since the beginning of the project (32% to 14.2%)	Increase % of mothers of children age 0-23 months who wash hands with soap at two or more appropriate times from 18 % to 70% Increase % of children 0-23 months with diarrhea who are offered increased fluids from 32.4% to 70% % of children 0-23 months with diarrhea who received continued or increased feeding from 63.4% to 80%. Increase % of children 0-23 months with diarrhea who receive oral rehydration solution and/or home recommended fluids from 43.7% to 70%. Increase % of children age 6-23 months fed according to a minimum of appropriate feeding practices from 25.6% to 50%. Increase % of children who were immediately breastfeed with no prelactal feeds from 62% to 75%. Increase % of 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 to 60%

Project Objective # 2: Improve availability and access to essential health commodities at the community level			
Inputs	**Activities**	**Outputs**	**Projected Outcome**
Trainers IEC materials Logistical support Supervision	2.1 Facilitate increased access to LLITNs in the project area in collaboration with public sector funders, Global Fund, DFID and other donors. 2.2 In partnership with the MOH, WHO and UNICEF, pilot CCM of diarrhea and malaria by training and mobilizing selected CG volunteers to distribute ORS packets, zinc and effective anti-malarials	2.1 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 LLITN because the stock was insufficient and because some families received additional bednets. 2.2 CG volunteers were given ORS packets to distribute during the first 2 years of the project. However, the MOH has implemented a decentralized system through which ORS packets are only available at HC level. Zinc has not yet been approved for CCM and anti-malarials and rapid test kits will only be available in areas where projects have their own supply.	Increase % of households with a child 0-23 months who own an LLITN from 3.0% to 50.0%. Increase % of children age 0-23 months who slept under an LLITN or an ITN treated within the past 6 months the previous night from 8.0% to 50.0% Increase % of women who slept under an ITN during last pregnancy from 32.7% to 50.0%. Increase % 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 from 17.1% to 60.0%.
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**	**Projected Outcome**
Trainers IEC materials including booklets for use in training	3.1 Invite MOH staff to participate in Promoter training workshops for child survival project interventions	3.1 MOH staff have participated in said training workshops.	Increase % of children aged 12-23 months who received measles vaccine according to the vaccination card by the time of the survey from

CG volunteers Logistical support Supervision	3.2 Train CG volunteers in BCC messages every two weeks through CG Promoters	3.2 All volunteers have been trained in BCC messages for diarrhea, malaria and nutrition. The benchmark for bi-weekly meetings has been met by some CG and not by others.	55.1% to 80%. Increase % 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 80%.
	3.3 Saturate communities in the project area with focused BCC messages, reaching every household every two weeks through CG volunteers.	3.3 CG volunteers have been making home visits but the benchmark of reaching every household every two weeks has not been met. The main constraint raised by CG volunteers, promoters as well as MOH staff has to do with the cultural interpretation of volunteerism, i.e., the volunteer's family should —get ahead".	Increase % 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 80%. 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 80%.
	3.4 Mobilize religious leaders and community opinion leaders to learn BCC messages and share these messages with their congregations and communities.	3.4 A total of 350 religious leaders have been 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. Religious Care Groups have been meeting since September 2008.	
	3.5 Sensitize community-based private drug sellers, traditional healers and traditional birth attendants about danger signs and appropriate drug use through community-level meetings led by Promoters.	3.5 As the MOH has not yet put in place community-based distribution of anti-malarials or zinc, these activities have not yet begun.	

B. OVERVIEW OF THE PROJECT

Project goal and objectives: 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 Kibuye Health District, Gitega Province. These outcomes will 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. Therefore, the beneficiary population is currently 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. (Source: DIP, p. 30)

Beneficiaries (Children and Women)	**Percentage**	**Population**
Children 0-11 months	3.94%	6,688
Children 12-23 months	3.94%	6,688
Children 24-59 months	6.48%	11,000
Children 0-59 months	14.36%	24,376
Women 15-45	22.49%	38,176
Total Beneficiaries		**62,552**

Technical and cross-cutting interventions

The Community Integrated Management of Childhood Illness is a cross-cutting strategy across interventions 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, and pregnant women to obtain pre and post-natal care, and to deliver at the health centers.

Project Design:

This project has implemented a Community Integrated Management of Childhood Illness (C-IMCI) project 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 have met every two weeks with project staff for training, supervision and

data collection. Each volunteer is responsible for regularly visiting 10 of her neighbors to share what she has learned during training and to encourage behavior change. Each Care Group is trained and supervised by a paid health promoter who in turn is supervised by a WR district staff. Promoters and supervisors work closely with MOH staff to improve utilization of health services and to coordinate outreach activities. WR central staff train and supervise both district supervisors and health promoters. WR/USA provides technical oversight as well as financial management support.

Partnerships:

Partnerships have been created on many levels. At the *colline* level, NK have been involved in project activities such as the census, training sessions and data collection. At the commune level, local authorities have 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 have jointly discussed health data with CSP promoters. At the district level, MOH staff and CSP staff have just begun to jointly analyze commune data. During the debriefing of the MTE preliminary results with the Provincial Medical Officer, he expressed his interest in having CSP staff join the Provincial quarterly meetings in order to improve coordination of activities.

The CSP staff continue to meet with MOH central staff, UNICEF and WHO to keep abreast of new strategies being discussed for community-based implementation.

The CSP staff also meet with staff from other NGOs such as Concern, CRS and Healthnet-TPO to share strategies and lessons learned in the implementation of activities.

Mission collaboration

Burundi is classified as a USAID Limited Presence Country with oversight from USAID/East Africa. WR maintains communication with personnel from both offices. Thus far, the CSP has received 2 site visits from USAID/Burundi. The MTE team met with Jim Anderson, USAID/Burundi Country Representative and Donatien Ntakarutimana, Program Development Specialist, Health to discuss the preliminary results and their main recommendations.

C. DATA QUALITY: STRENGTHS AND LIMITATIONS

Quantitative and qualitative data was obtained to evaluate this project at midterm. As the baseline KPC-2000 survey had been translated into Kirundi, the same questions were used for this survey. The Lot Quality Assurance Sampling method was used to randomly determine 24 respondents per commune for each indicator, with a total sample of 96 district-wide.

Qualitative data was obtained through individual interviews, focus groups and direct field observations. Key questions were elaborated in French with the evaluation team for each type of interview or focus group. (See Annex 9). One limitation to the evaluation process was that these questions were not then translated into Kirundi so that all questions were

being asked in the same way. The team determined that the sample size at certain levels would be complete while at other levels would be a random sample. TheMTEteam was divided into 3 smaller teams so that a member of MOH district or provincial staff was in each as well as a member of WR district and central staff. After completing each interview set or focus group, the teams debriefed and summarized the results. The summary was further analyzed for common themes (Annex 13), and then the team proposed recommendations which were grouped into categories (Annex 14). Key results and recommendations were then shared with the Provincial Medical Director, key MOH staff in Burundi, USAID and other NGOs who are also involved in child survival projects.

D. ASSESSMENT OF PROGRESS TOWARD THE ACHIEVEMENT OF PROJECT RESULTS

Table 2: **M&E Matrix—Progress at Mid-Term**

Objectives	Indicators	Data Source	Baseline Value	MTE Value	Final Target	Explanation of progress
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 fluid	KPC	43.7%	78.1%	70.0%	CSP has effectively taught mothers the appropriate care and has met the final target.
	Community ORS Distribution: Number of ORS packets distributed by volunteers	Care Group Registries& Monthly Project Reports	N/A	10,916	N/A	
	Health Center ORS Stock: % Health Centers without ORS stockouts each month	Health Center Registries &Monthly Project Reports	N/A	86.0%	N/A	Only one health center reported a temporary stock out due to the decentralized system not being communicated clearly.
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%	70.0%	
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%	70.0%	

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
	Zinc: % children age 0-23 months with diarrhea in last two weeks who were treated with zinc supplements	KPC	N/A	N/A		MOH has not begun community-based zinc distribution
	Community Zinc Distribution: Number of zinc treatment courses distributed by volunteers.	Care Group Registries& Monthly Project Reports	N/A	N/A		MOH has not begun community-based zinc distribution.
	Health Center Zinc Stock: % Health Centers without zinc stockouts every month	Health Center Registries &Monthly Project Reports	N/A	N/A		MOH has not begun distribution of zinc to HC.
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%	70.0%	
	Soap at the place for hand washing: % 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%	N/A	
	Safe feces disposal: % 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%	N/A	
	Latrines: % mothers of children 0-23 months who have a covered latrine or toilet connected to a drainage system.	KPC	9.0	14.6%	N/A	
	Point of Use: % households of children age 0-23 months that treat water effectively (includes boiling, chlorination, solar disinfection, and filtration).	KPC	1.7%	4.2%	N/A	
	Community Sur'eau Distribution:Number of	Care Group Registries&	N/A	N/A	N/A	MOH has not re-started Sur'Eau

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
	Sur'eau units distributed by volunteers	Promoter Reports				distribution, but anticipates doing so.
	Two-week period prevalence of diarrhea: % children age 0-23 months who had diarrhea at any time in prior 2 weeks.	KPC	23.7%	46.9%	N/A	
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%	75.0%	
	Exclusive breastfeeding: % children 0-5 months who were exclusively breastfed during the last 24 hours	KPC	86.4%	86.5%	N/A	
Increase % infants and young children age 6-23 months fed according to minimum appropriate feeding practices	Infant and young child feeding: % infants and young children age 6-23 months fed according to minimum appropriate feeding practices	KPC	25.6%	--	50%	Frequency of feeding (part of the minimum appropriate feeding practices calculation) was not measured in the midterm survey, thus no midterm value available.
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%	60.0%	
	Dietary diversity of foods consumed by young children: Mean number of food groups eaten in the last 24 hours by children age 6-23 months	KPC	3.2	4.6	N/A	
	Vitamin A supplementation in the last 6 months: % children age 6-23 months who received a dose of Vitamin A in the last 6 months (care verified or mother's recall).	KPC	81.7%	80.2	N/A	

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
	Underweight: % 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%	N/A	Baseline and midterm KPCs conducted in different seasons.
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%	50.0%	
	Number of LLITNs distributed by volunteers	Promoter distribution records	N/A	N/A	N/A	Promoters and CG volunteers have participated in distribution activities organized by community leaders, not project.
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%	50.0%	Though usage has greatly increased, only three quarters of households own LLITNs.
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%	60.0%	CG volunteers appear to be making more referrals.
	Number of antimalarial treatment courses distributed by volunteers	Volunteer distributor registries and promoter reports	NA	NA	NA	MOH will be rolling out CCM for malaria in areas where projects have their own supplies
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%	50.0%	
	% mothers of children 0-23 months who took effective antimalarials during the pregnancy with the youngest child	KPC	N/A	N/A	N/A	IPT for preganant women is not current policy in Burundi.
	Two-week period prevalence of fever: Proportion of children age	KPC	37.0%	53.13%	N/A	

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
	0-23 months with a report of fever in the last 2 weeks					
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%	80.0%	CG volunteers and health promoters have been actively involved in MOH immunization activities. Note discrepancies between indicators based on recall vs. card.
	Access to Immunization Services:% children 12-23 months who received DPT1 according the vaccination card or mother's **recall**	KPC	94.9%	95.8%	N/A	
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%	80.0%.	Note discrepancies between indicators based on recall vs. card.
	Health System Performance regarding Immunization Services: % 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%	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%	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%	N/A	
	Vaccination card or health booklet –Ever had: % mothers of children 12-23 months who were ever	KPC	94%	97.9%	N/A	The project measured this indictor among 12-23 month

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
	given a vaccination card or health book for their youngest child 0-23 months					children, rather thn 0-23 month children.
	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%	N/A	Of the 15 households visited during MTE, 11 or 73.3% had vaccination cards or a written record. The project measured this indictor among 12-23 month children, rather thn 0-23 month children.
	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%	N/A	
	Polio 0		69.7%	61.5%	N/A	
	Polio 1		65.3%	63.5%	N/A	
	Polio 2		61.7%	62.5%	N/A	
	Polio 3		56.0%	63.5%	N/A	
	Measles		55.1%	57.3%	80.0%	
	Pentavalent 1(DPT1, Hib, and HepB)		62.5%	63.5%	80.0%	
	Pentavalent 2 (DPT2, Hib, and HepB)		63.0%	63.5%	N/A	
	Pentavalent 3 (DPT3, Hib, and HepB)		61.0%	62.5%	80.0%	
	Drop-Out Rate: (DPT1-DPT3) / DPT1:(% children age 12-23months who received DPT1 by 12 months 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	KPC	2.5%	1.6%	N/A	

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
	receivedDPT1 by time of survey according to vaccination card or health booklet.					
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%	80.0%.	
CAPACITY BUILDING & SUSTAINABILITY						
Mobilization of Community Volunteers through the Care Group Structure.	Care Group Attendance: Number and percent of Care Groups with at least 70% volunteer attendance per month	Promoter & Supervisor Reports	N/A	124.64/ 208 or 59.9%	70%	Data for years 2 and 3. Numerator: average number of care groups with at least 70% attendance per month; Denominator: total number of care groups.
	Volunteer Attrition: 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%	<10%	Note: Year 3 includes volunteers who dropped out due to death or moving out of the area.
	Care Group Performance: Percent of Care Groups averaging 70% or above on verbal tests of intervention knowledge	Promoter & Supervisor Checklists	N/A	93.5%	70%	Sample of 31 care groups verbally tested in year 3 (29/31 care groups averaged 70% or above)
	Pastoral Groups: Number and percent of pastoral groups that meet per month.	Supervisor Monthly Reports	N/A	18.68/24.5=76.2%	70%	Numerator: average number of pastoral care groups that met, per month; Denominator: average total number of pastoral care groups (24 in year 2, & 25 in year 3)
Integration of Care Group Model with Existing Ministry of Health C-IMCI Structure	CHW Integration: Average number and % Care Groups with a CHW in attendance in at least one meeting per month	Promoter & Supervisor Reports	N/A	43.4, 43.3/208=20.8%	70%	Numerator: average number of care groups per month with at least 1 CHW in attendance in at

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
						least 1 meeting; Denominator: total number of care groups
	TPS Integration: Average number of Care Group supervision visits made per TPS per month	Promoter & Supervisor Reports	N/A	2.1	4	
Institutionalization of Project Health Information System with District Health Information System	Institutionalization of C-HIS: Number and % health facilities involved in management of C-HIS per month	Supervisor Monthly Reports	N/A	11, 11/11= 100%	80%	All 3 health centers visited indicated that their staff was involved in data analysis with CSP promoters.
	Institutionalization of Community-IMCI Number and % COSAs involved in management of C-HIS per month	Supervisor Monthly Reports	N/A	N/A	80%	This will be collected starting in the second half of year 3.
	Institutionalization of Community-IMCI: Number and % COSAs with current action plans for community health	Supervisor Monthly Reports/	N/A	10/11= 90.9%	80%	Measured October 2008. Focus group data indicated that the 3 COSA 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%	N/A	
	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%	N/A	
	Skill Birth Attendance: % children age 0-23 months whose births were attended by skilled personnel.	KPC	60.3%	81.3%	N/A	On-going project reports indicate that the rate of home deliveries has dropped from 32% to 14.2%.
	Post-natal Visit: %	KPC	32.7%	66.7%	N/A	

Table 2: **M&E Matrix—Progress at Mid-Term**						
Objectives	**Indicators**	**Data Source**	**Baseline Value**	**MTE Value**	**Final Target**	**Explanation of progress**
	children age 0-23 months who received a postnatal visit from an appropriate trained health worker within three days afterbirth					

DISCUSSION OF THE PROGRESS TOWARD ACHIEVING RESULTS AND CONTRIBUTION TOWARD OBJECTIVES/RESULTS

The strategy of using Care Groups has been implemented in the whole district to sensitize the population on BCC messages. The PD/Hearth strategy has also been successfully implemented as participating malnourished children have gained weight. Of the 1,693 children who completed all 12 days of Hearth, 57.1% of them had achieved adequate or catch-up growth (400+ grams) when weighed 2 months after their participation in Hearth. The participation of 1,693 children 0-3 years old represents about 10% of all the children 0-3 in the entire project area. Nonetheless, the percent of children underweight for age as measured in the KPC surveys has increased from 16.4% to 36.5%, possibly due in part to seasonality. Immunization rates as measured by card (and including *all* children 12-23 months in the denominator) lag below project targets; nonetheless, when mother's recall is included, as defined by the Rapid CATCH indicators, coverage rates are very high. From an activity standpoint, most key areas are progressing well except for those which depend on whether the MOH will decide to implement community based management of diarrhea and malaria as well as the distribution of zinc.

Cross-cutting strategies have resulted in strong outcomes.

- Social and behavior change activities, including community mobilization and outreach strategies: Qualitative data indicates that in addition to community volunteers learning new health messages and behavior, social change has occurred. Members of the Batwa tribe who are often marginalized have become members of the Care Groups. Women's attitudes have changed, and pastors in the Care Groups repeatedly spoke of how encouraging it was to them to meet with other pastors and participate jointly in community events.
- Community partnership-building: Community Health Workers (CHW) who represents 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 their village Care Group. At the commune level, CSP promoters work side by side with health center head nurses to analyze data collected by CG volunteers. At the district level, WR and MOH staff also review the data analysis. At the national level, WR staff share ideas with other NGO staff members, and also keep MOH personnel abreast of progress made.
- Strategies to increase access to health services: The Care Group model is associated with improvements in access to health services per the qualitative data obtained. 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, results from focus groups indicated that there was the perception that there were less cases of diarrhea, and that children who participated in the PD/Hearth program gained weight more rapidly than when they did in the facility based nutritional recuperation sites (2 weeks vs. several months).
- Capacity building: 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.

- Human resources strategies, such as skills-based training and supervision: Hiring generalists as promoters instead of health personnel has proven to be important as generalists have had a community development background which has facilitated creating partnerships at the *colline* and commune levels. The CSP promoters have had some training in participatory training strategies. Bi-monthly supervision/training sessions of volunteers reinforce learned health behaviors. CSP staff have benefited from conflict resolution training which has provided them with team building skills. More attention needs to be given to monitoring and evaluation skill building at the district level. The CSP staff member responsible for monitoring and evaluation (M & E) has benefitted from additional training. This was essential as he was a generalist with community experience but with little Monitoring & Evaluation background.
- Health systems strengthening: Care Group volunteers are collecting household data every two weeks, which CHWs, due to their limited number, have not been able to accomplish. This has led to more timely information about potential health crises occurring. Data collection and supervision have also been systematically implemented.
- Quality assurance: Reviewing previously taught health messages twice a month with CG volunteers ensures that the messages are consistent across all Care Groups. When the promoters were trained about diarrhea, they then used the KPC questions per this intervention to monitor whether volunteers were correctly collecting data as well as giving community members the correct messages.
- Information management system strengthening: 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 summarized by the CSP supervisors who then report their findings to CSP management.
- Policy dialogue and advocacy at the local or national level. CSP project staff review MOH strategies with district-level personnel. The MTE provided an important venue to obtain up-to-date program implementation information as well as an opportunity to advocate with provincial and central MOH staff so that community-based distribution of ORS packets by volunteers could be resumed. MOH is planning to roll-out a nutrition program using pre-packaged weaning porridge. CG volunteers participated in the distribution of treated bednets to families in their catchment area.

Contextual Factors

Post-conflict development is underway, but evidence of residual impact of the conflict remains especially in the expectation that outside agencies should be providing goods to local families. For example, in the PD/Hearth program, families have repeatedly asked when they were going to receive food supplements that other projects were handing out in their nutrition programs. Women were at first reluctant to come with the foods available in their own kitchens to the PD/Hearth meetings, but

grasped the concept of using what was available in their own home to help make a difference in their children's health. This dependency mentality was noticeable 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 ~~–s~~oap". CHWs would like to receive something from this project as they are participating in the supervision of volunteers, and also TPS as they do field visits.

District-level MOH also perceive that their workload has increased. The current performance-based salary structure used by MOH only includes one performance criterion for community health, related to latrines. TPS are expected to pay for their own gas when they go out on supervision, and mainly receive compensation for quantity of latrines in their catchment area. The MOH pays the *nyumbakumi* leader a small amount for referring pregnant women to the health center to deliver, 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 team recommends that these gifts be distributed during a community event, rather than ~~–b~~ehind doors". This openness would decrease community members' speculation of what CG volunteers are receiving.

The concept of volunteerism is interpreted as follows. In Burundi, 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. Currently, CG volunteers are returning home with empty hands, and it is perceived that their families are not better off than before. This will eventually lead to discouragement as well as resignations. Husbands have been reluctant to allow their wives to be part of CG as they come home with empty hands. The team recommends that income generating activities become part of the CG design, and that the strategies used by WR elsewhere in Burundi be duplicated in Kibuye district.

Distribution of bednets: An inequitable distribution was noted during home visits. Some families had one for each bed with several in reserve still in their plastic bags, while just next door, families had none. Women who deliver their babies at the health center are to receive a bednet when discharged. Anecdotal information indicated that even when lists of needy families had been prepared before the distribution occurred, other community members took precedence. This is a frequent community phenomenon when resources are scarce. Several strategies could be developed to ensure an equitable distribution. CG volunteers could distribute a bednet to each family whose child who is part of PD/Hearth. A bednet could be a prize given to the family with the cleanest latrine. WR supported but did not lead LLITN distribution efforts in the community.

Role of Key Partners

Partners	Role in Project	Result of Collaboration/Suggestions for Improvements
Ministry of Health	Commune level: data analysis	Commune: Joint data analysis has been strengthened between head nurses and WR promoters. Suggestion: Continue to monitor and provide guidance as necessary.
	District level: supervision	District: Joint field supervision has been sporadic (WR supervisors and TPS). Joint data analysis has not occurred 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	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.
	Central level: national guidelines	CSP has not had a consistent project manager. This has led to limited interactions with central MOH personnel
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	Is spear-heading community-based malaria treatment. Has visited the project to learn more about strategies being implemented.
UNICEF	Central level	Possible source for additional baby scales.

Overall Design Factors That Are Influencing Progress Toward Results

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. The Community Integrated Management of Childhood Diseases (C-IMCI) project has been designed 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.

The bi-weekly training/supervision meetings that are organized by the CSP Health Promoters are an ideal setting for reinforcing prior health messages learned by the CG volunteers, for problem-solving situations the volunteers face as they sensitize their neighbors, and for collecting health data (morbidity and mortality) more extensively and in a timely manner.

DISCUSSION OF POTENTIAL FOR SUSTAINED OUTCOMES, CONTRIBUTION TO SCALE, EQUITY, COMMUNITY HEALTH WORKER MODELS, AND GLOBAL LEARNING

Progress Toward Sustained Outcomes

A formal sustainability design methodology was not included in the DIP. That said, the strategy of focusing on key health behaviors as well as on the use of local food available in homes will foster long-term behavior change.

Immunizations: Comparison of baseline data to MTE data using Rapid CATCH indicator definitions (based on card *or recall*) for immunization rates have already exceeded the projected targets: measles (90.6%), DTP1/Pentavalent1 (95.8%) and DPT3/Pentavalent3 (90.6%). However, coverage rates are much lower (57.3%, 63.5% and 62.5%, respectively) when calculated based on card verification and all children 12-23 months (not just those with cards) are included in the denominator, as defined by the official project objective.

Maternal and Newborn Care: MTE data indicated that more women are receiving the care that they need: 86.5% [CI= 78.00 – 92.6%] of mothers with children age 0 – 23 months had received at least 2 tetanus toxoid vaccinations before the birth of their youngest child or more than double from baseline (52..3% [CI = 46.5 – 58.1%]. The percent of women whose births had been attended by skilled personnel also rose from 60.3% [CI = 54.6 – 65.9%] to 81.3% [CI = 72.0 – 88.5%]. Postnatal visits have also improved: 32.7% [CI = 27.4 – 38.3%] at baseline to 66.7% [CI = 56.3 – 76%].

Nutrition and Growth Monitoring: During the focus groups and home visits, women commented that, in the past, when they needed to take their malnourished children to the health center for supplemental feedings, they needed to be in the program for several months before seeing change. With the PD/Hearth strategy for community-based rehabilitation of malnourished children, they saw improvements within 2 weeks. This observation has been validated by project data which has shown that 62.4% of the children in the Hearth program had gained 200 to 600 grams within the first 12 days. This weight gain was sustained for one month by 55.0% of the children. After two months, 57.1% of the children had maintained a weight gain of 400g or more. Between baseline and midterm, there was an increase in children 0 – 23 months who were underweight (-2SD of the median weight for age per WHO standards). Two observations need to be made. First, baseline data was collected in May 2008 which is at the end of the rainy season when food is being harvested, and MTE was collected at the beginning of the rains when less food is available. This may also be an indication of food insecurity post conflict. **Recommendation**: CG volunteers who have created cooperatives receive either seeds or start small animal husbandry activities would provide additional food.

Vitamin A Supplementation: This indicator has shown a slight decrease, going from 81.7% [CI = 75.5 – 87.9%] to 80.2% [CI = 70.8 – 87.6%].

Malaria: More children are sleeping under treated bednets. At baseline, 8.0% [CI = 5.2 – 11.7%] of the children surveyed slept under treated bednets, and at MTE, 64.6% [CI = 54.2 – 74.1%]. Early treatment for fever (within 24 hours) has also improved from 17.1% [CI = 0.0 – 39.5%] at baseline to 49.0% [CI = 39.0 – 59.0%].

Control of diarrhea: The use of ORS and/or recommended home fluids has improved. At baseline, 43.7% [CI = 31.9 – 56.0%] of the children age 0 – 23 months had received fluids and at MTE, 78.1% [CI = 68.5 – 85.9] had. It must be noted that CG volunteers were able to distribute ORS packets for a limited time only due to the change in MOH distribution system in which ORS packets are now only available at health centers. **Recommendation**: CSP explore the possibility with MOH that CG volunteers could access ORS supplies at health centers.

Water and Sanitation: Water treatment has not improved as much as hoped. Of the households surveyed at baseline, 1.7% [CI = 0.5 – 3.8%] had treated water and at MTE, 4.2% [CI = 1.1 – 10.3%]. Boiling water takes time even when fire wood is available. **Recommendations**: Explore other options to treating water such as biosand filters or sun exposure of water in painted (black) bottles. Negotiate with MOH to add treated water to

the performance indicators for TPS. Hand-washing practices increased from 18.0% at baseline to 38.5% at midterm, though soap at the place of handwashing dropped slightly from 53.7% [CI = 47.8 – 59.4%] at baseline to 46.9% [CI = 36.6 – 57.3%] at midterm. It was observed during the MTE home visits that very few households had hand-washing stations and families would indicate the shower area as the site where they had soap. **Recommendation**: Teach CG volunteers how to make simple devices such as the Tippy Tap to encourage hand-washing practices.

Pneumonia: More children are being treated by an appropriate health provider in a timely way for cough and/or fast breathing. At baseline, 52.9% [CI = 42.8 – 62.9%] had been treated to 82.3% [CI = 73.2 – 89.3%] at midterm. This was also found during focus group discussions as participants stated that they now go to the health centers for care rather than to the traditional healers.

The project has not yet developed a phase-out plan but plans to do so.

Financial sustainability at the local level needs to be strengthened. Most Care Groups have also created a cooperative, with mixed financial results. It is recommended that CG volunteers become involved in income generating activities which have been shown to be successful in other WR projects in Burundi.

Demands for immunizations as well as prenatal care and births at the health centers have increased.MTEresults for immunizations show mixed results, depending on the source of information (card vs. card or recall). Health centers have documented an increase in prenatal care visits, and births, the latter success being linked to the strategy of giving each woman a LLITN upon discharge. Post-natal visits have not increased as much.

The Care Group model is a decentralized one as women are elected from groupings of 10 – 12 households to serve as volunteers. These volunteers have increased opportunities for outreach activities for which CHWs are responsible.

The goal of the CSP is to integrate the volunteer structure into the MOH health system. The main challenge is that culturally, 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 who receive a small remuneration when pregnant women are referred to the health center for delivery.

Contribution to replication or scale up

The challenges that the CSP has identified and how they are resolved, as well as World Relief's prior experience in Care Groups will continue to make important contributions to the replication of this model. Concern/Burundi has also adopted the Care Group model for their CSP. Should the project implement income generating activities to encourage volunteer participation in on-going health promotion activities, the lessons learned will also contribute to the replication of this model.

Attention to Equity

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 have historically not participated in community activities.

The CSP has built upon the CHW platform by creating Care Groups which further decentralized BCC messages and data collection.

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.

The CSP is not specifically measuring improvements in equity, though qualitative data does indicate that women's attitudes have changed for the better. There are also CG groups whose members are from the Batwa tribe, thus empowering that ethnic group to improve their health.

Role of Community Health Workers

As described elsewhere, Community Health Workers are considered to be part of MOH personnel and receive a small stipend for their community outreach activities. They are trained to sensitize the population in 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.

CONCLUSIONS AND RECOMMENDATIONS

The project design has been effective per available quantitative and qualitative data at midterm. There has been an increase in key indicators since baseline data collection, 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; more families have LLITNs and have used them in the weeks prior to the KPC survey and mothers recognized at least two signs that indicate need to seek care for their sick child. Vaccination results varied according to the source of information: coverage has exceeded project targets when based on mother's recall though not as evidenced by card, most likely due to lack of card retention. Feeding practices were mixed: Immediate breastfeeding after birth improved and malnourished children who participated in PD/Hearth responded well. However, Feeding practices for children with diarrhea declined since baseline.

The midterm evaluation team recommends that access to potable water be added as an indicator to personnel performance in the national health system for TPS, and project

coordination and monitoring be added to district, provincial and national performance indicators. It also recommends that CHWs continue to be included not only in data collection but in training and supervision meetings so that they and CG volunteers are transmitting similar BCC messages. In addition, CSP staff will need to continue to work with MOH HIS personnel in analyzing data and coordinating program activities. It is strongly recommended that this project's vision and strategies be reviewed with MOH personnel at all levels so that the focus on health promotion preventive care and use of local resources is be more clearly understood. WR/Burundi and other NGOs involved in child survival programs need to 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.

Strategies to discourage the dependency attitude and to encourage the on-going activities of CG volunteers could include income generating activities, whether in cooperative gardens or small animal husbandry. If the inclusion of project coordination and monitoring as MOH performance criteria is not foreseeable, negotiate with other NGOs so that a unified approach be implemented in partnering with MOH personnel.

The CSP on-going activities could be strengthened by training supervisors and health promoters in participatory teaching strategies and group dynamics, and by creating IEC materials, such as story boards or flash cards, which could be used in small group settings. CSP supervisory staff need to be trained in personnel performance evaluation. In addition, it is recommended that the CSP salary structure be reviewed and aligned with other NGO. Hire someone who has training and material development expertise to provide technical assistance to WR programs through the Baltimore office. Additional recommendations in the areas of program activities, human resources, training, supervision, partnerships and data collection are described in Annex 14.

THE ACTION PLAN FOR RESPONDING TO EVALUATOR RECOMMENDATIONS

The action plan proposed builds on the recommendations which the CSP and MOH personnel wrote after analyzing the qualitative data, and reflects the partnership approach in thinking about strategies which would make this project stronger (see Annex 4- Workplan). These recommendations were then reviewed with the Provincial Medical Director and central level MOH personnel, USAID/Burundi, other NGOs as well as WR/Burundi staff before finalizing them.

Evidence of how the WR/Burundi CSP team incorporated the recommendations can be clearly found in ten of the planned activities for the next project year. There are several examples. One of the recommendations was to hire promoters and supervisors who lived in the district. In the action plan, under IR 1- 3, the team has indicated that strategy. Another was distribution of incentives to CG volunteers in community events so as to recognize publicly their work. Another was to integrate participatory teaching strategies

in the training program. And, not to give an exhaustive list, the evaluation team had recommended that CHWs be integrated in the training sessions planned for CG volunteers and that CSP district staff participate in the quarterly meetings at the provincial level with MOH and other NGOs involved community programs in Gitega Province. These two recommendations are also part of the work plan as (see Annex 4).

Annex 1: Results Highlights

The Care Group Model is emerging as a best practice. World Relief has implemented this strategy in other countries including Mozambique, Malawi, Rwanda and Cambodia. Concern Worldwide has also chosen to use this model in their current project in Burundi and other organizations are using it elsewhere.

The Care Group Model is being used in Burundi with an aim to decrease the morbidity and mortality due to common childhood diseases, in particular diarrhea, malaria and malnutrition, to increase immunization rates, and decrease maternal mortality.

The CSP has trained 1895 volunteers who are grouped in 189 Care Groups. These groups meet every two weeks and are supervised by health promoters. The role of the health promoter is to review key messages, help CG volunteers problem solve barriers to behavior change, and collate and then analyze the data the volunteers collect every two weeks. MOH CHWs participate in Care Group activities, and most female CHWs are also CG volunteers. Promoters share motorbikes to reach their Care Groups and conduct supervision of volunteers during home visits. Two or three health promoters are affiliated with each health center and analyze data with health center staff. Promoters are in turn supervised by CSP supervisors who coordinate activities with MOH staff.

As of July 2010, the number of direct beneficiaries was 24,376 children under five and 38,176 women of reproductive age living in 15,195 households.

Results thus far have been promising. Highlights include:

- ORT use for children with diarrhea increased from 43.7% to 78.1%;
- Safe disposal of children's feces has increased from58.2% to 79.2%;
- Breastfeeding within one hour of birth and without prelacteal foods increased from 62.0% to 79.2%;
- Households with LLITNs increased from 3.0% to 75.0%;
- Treatment seeking for fever within 24 hours increased from 17.1% to 53.1%;
- Treatment seeking for suspected pneumonia increased from 52.9% to 82.3%;
- Knowledge of two or more child danger signs that require immediate care seeking increased from 62.2% to 86.5%;
- Skilled birth attendance increased from 60.3% to 81.3%

Annex 2: List of publications and presentations related to the project
None to date

Annex 3: Project Management Evaluation

Financial Systems: The WR/Burundi chief accountant uses Quick Books to send monthly reports to WR/USA through the internet. He supervises 4 accountants and two assistants, and encourages WR/Burundi staff to use value-based management of funds, i.e., "not to spend just to spend". For large expenses, he will send out a request for bids which are reviewed by an internal committee on which will sit a member of the project or department needing supplies. A petty cash of 100,000 BF is used to cover small expenses. A bank account has been set up in Gitega for ease in obtaining funds. WR/Burundi has an accountant in the project office in Kibuye who manages pre-approved expenses through a voucher system. *Evaluation*: The current system appears to follow best practices in accounting. The chief accountant would like to encourage project staff to prepare budgets in "real time" so that they reflect anticipated expenses covering a 2 week period.

WR Baltimore manages the technical support budget.

Logistical Systems: The chief accountant is also responsible for logistics and noted that vehicles and motorbikes have been purchased. As the price of gas has increased, that budgetary line item will also need to be increased. Staff use gas coupons, and the motorbikes are not kept in the field but returned to Gitega office for the weekend (many of the promoters do not live in Kibuye). Promoters noted during their interviews that this policy puts an additional burden on them and as they need to share motorbikes, hinders field activities. **Recommendations**: Increase the budget line item for gas, and purchase additional motorbikes so that promoters are freer to go out into the field.

Human Resources: 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 advertized by radio or through the newspapers. The hiring committee reviews all applications and interviews qualified candidates with particular attention to their personal values. Preference is given to Burundians than to expatriates. New staff have 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. **Recommendation**: Based on focus group data, CSP supervisors would like to be trained in how to use the performance evaluation tool.

Training: Four booklets were created by selecting content from the CHW manual. These booklets are used to train health promoters as well as CG volunteers, and are used on home visits to reinforce BCC messages. The booklet layout makes them difficult to use as a visual aid during teaching. As the health promoters are to supervise volunteers, their knowledge based needs to be more extensive. The CSP Training Officer was not given sufficient technical assistance in planning and implementing the training sessions or developing training materials. **Recommendations**: Provide additional content training to the health promoters. Create IEC materials such as story boards or flashcards that volunteers can use during outreach activities. Hire a trainer with experience in

participatory training strategy and IEC materials' development to provide technical assistance from WR Baltimore.

Annex 4: Work Plan Table

Work Plan CSP, September 2010- September 2011

Results	Major Activities	Year 4				Personnel
		Q1	Q2	Q3	Q4	
Management of Project Personnel						
IR 1-3	Recruit and Hire 3 Promoters to replace those who left; prioritizing local people living in the CSP location and generalists. Review the current WR salary structure to align it with other NGOs, in particular the salaries for the health promoters. Be flexible with Pastor's Care Groups, when they move to a new congregation, replace him/her with the new pastor from the first congregation instead of having the former pastor travel a long distance to continue to participate in the group. Hire someone who has training and material development expertise to provide technical assistance to WR programs through the Baltimore office.	X				WRB Human Resources, CSP Leadership Team, WRB Director of Programs, WRB Director of Programs
IR 1-3	Quarterly Planning with Supervisors and Promoters	X	X	X	X	Supervisors, Promoters, CSP Leadership Team

IR 1-3	Supervision of Promoters using Performance Checklists. Include supervision as a performance indicator for PHTs.	X	X	X	X	Supervisors, Training Officer
IR 1-3	Weekly Monitoring/Discussion Meetings with Promoters	X	X	X	X	Supervisors, M&E Officer
IR 1-3	Promoter test on all interventions	X	X	X	X	Training Officer, Supervisors, Promoters
IR 1-3	Distribute Annual Incentives to Volunteers with purpose to support CG associations and use the event to enhance community recognition vis-a-vis volunteers. Thank all volunteers, partners, funding agencies, MOH personnel at district, provincial, and national levels. Meet with district administrators to request that a day be designated as –Child Survival Day" or to include CSP volunteers in other district-wide events so that the results of the project can be shared with a wider audience. During these public events, distribute items, such as jerry cans, to the volunteers. Schedule community meetings to discuss the concept of volunteerism. Budget additional funds for the next project evaluation to cover transportation expenses for each group involved in the process (ex., pastors' groups, volunteer	X	X	X	X	Promoters, Supervisors, CSP Leadership Team, Promoters and Supervisors

	groups) and also include refreshments. Purchase T-shirts with CSP logo or other identification and book bags for the Care Group volunteers. Plan to send members from more successful Care Groups to encourage Care Groups where results have been weaker. This will give CG volunteers an opportunity to visit other sites.					
	Encourage volunteers to become role models and thus demonstrate behavior changes; also to spread the new messages to others in home visits, go beyond ~~–b~~being trained." Strongly plead for social change by finding local solutions to decrease dependence on external resources. a. Create messages which could be given during church services or other religious events b. Include local authorities so that they can also speak with family members who resist volunteering. c. Explore with other NGOs what common strategies could be used to move beneficiaries from a dependency mode to a development one. Set up a meeting schedule for the Care Groups at a predetermined location	X	X	X	X	Promoters and Supervisors, CSP Project Director, CSP Leadership Team, Training Officer

	Encourage volunteers to become role models and thus demonstrate behavior changes.					
	Curriculum and Teaching Materials Development					
IR3	Create other visual aids to use during the training of volunteers and home visits. Provide a carrying case for the booklets and visual aids. Train the CHWs and village leaders (NK) on the same content given to WR Care Group volunteers **General Training recommendations** (3/5/15/21/4/25): a. Review facilitation methods, group dynamics as well as adult learning principles with the volunteers, for ~~"~~we train the way we have been trained". b. Plan and implement in-service training for WR staff on child survival c. Implement a TOT (training of trainers) for WR trainers as part of the in-service program d. Provide health education resources for the health promoters that provide more content. e. Create lesson plans and handouts that the health promoters could use when they train volunteers.	X	X			Training Officer, CSP Leadership Team and Promoters and Supervisors

	f. Train the health promoters in additional health education content. Increase the health content and skills in the promoter training program, being careful not to train them as nurses. This additional content will need to be included in the supervision grid. Train the PD/Hearth volunteers to monitor nutrition during home visits. Select other sites for training programs rather than just using Kibuye. Train CSP staff in family planning/reproductive health.					
IR3	Review and update of curricula and teaching materials for CDD	X				Training Officer, CS Project Manager
IR3	Review and update of curricula and teaching materials for Nutrition I &II	X				Training Officer, CS Project Manager
IR3	Review and update of curricula and teaching materials for Immunization			X		Training Officer, CS Project Manager
IR3	Review and update of curricula and teaching materials for Malaria			X		Training Officer, CS Project Manager
IR2	Develop curricula/training materials for HBM			X		Training Officer, CS Project Manager
IR 1-3	Supervision Training for CSP Supervisors	X				CSP Leadership Team, Supervisors
IR 3	CDD Training Camp		X			Training Officer, CSP Project Manager
IR 3	Nutrition I & II and PDH Training Camp integrating	X				Training Officer, CSP Project

	participatory methods/adult education & community mobilization and key message discouraging community dependence					Manager
IR 3	Immunization Training Camp				X	Training Officer, CSP Project Manager
IR 2	HBM Training Camp & Malaria Refresher Training for Promoters (pending approval)			X		Training Officer, CSP Project Manager
IR 3	Refresher training on control of diarrheal disease		X			Training Officer, CSP Project Manager
	TOT training for promoters on management of CG associations and IGA	X				Turame consultatnt, Training Officer, CSP Project Manager
	Child Survival Interventions					
	Reviewing CG biweekly schedule	X	X	X	X	Training Officer, CSP Project Manager, M&E Officer
	Involving Partners (TPS, HC titulaires, Nyumbakumi, Chef colline & S/Colline) in CSP activities (Trainings, Home visits and Supervisions)	X	X	X	X	All staff
	Integrating CHWs to Volunteer CG trainings	X	X	X	X	Promoters
	Review Religious Leader CG structure in order to improve geographic access to CG trainings	X				Promoters & supervisors
	Train CG associations on management of IGA and volunteerism		X	X	X	Promoters
	Nutrition Intervention					
IR 1-3	Refresher training of Volunteer CG on Nutrition & Vitamin A	X				All CSP Staff
	Refresher training of CG Religious Leaders on Nutrition & Vitamin A	X				All CSP Staff
	Refresher training of Light mother on PD/Hearth	X				All CSP Staff

	Light mothers conduct Home visit to PD/H participants after PD/H sessions	X	X	X	X	All CSP Staff
	PD/Hearth implementation and follow up Session II & III	X			X	All CSP Staff
	Maintain Bi weekly Home visits	X	X	X	X	All CSP Staff
	Sensitize Community members on Backyard Gardens	X	X	X	X	CSP Staff & Volunteers
	Diarrhea Intervention					
IR 1-3	Refresher training of Volunteer CG on Control of Diarrheal Disease		X			All CSP Staff
	Refresher training of CG Religious Leaders on Control of Diarrheal Disease		X			All CSP Staff
	Disseminate key messages on point of water treatment		X			All CSP Staff
	Promoting Hand washing stations (tip taps) Explore other options other than boiling for making water potable, and then add these options to the health messages. Add access to potable water as an indicator; specifying not only the number of latrines built but also their quality, (depth of hole, concrete slab). Negotiate with the public health technicians to also include the quality component when they evaluate latrines. Involve cooperatives/community associations as well as local authorities to help the poorest families purchase supplies needed for building their latrines.		X			All CSP Staff
	Maintain Bi weekly Home visits	X	X	X	X	Promoters
	Reinforce message on Latrine/ Increase support for the	X	X	X	X	Promoters & supervisors

	construction of latrines.					
	Advocacy to MOH for integrating an indicator on latrine into C-PBF. Clarify with MOH whether community-based distribution of ORS packets will be implemented. Encourage MOH to include community-based distribution though the Care Groups.	X				CSP Manager
	Follow –up of Diarrhea Control activities	X	X	X	X	All staff
	Volunteer test			X		Promoters
	Immunization Intervention					
IR 1-3	Continue EPI education campaign, beginning with refresher training of Volunteer CG on Immunization				X	Promoters
	Refresher training of Religious CG on Immunization				X	Promoters
	Home visits to community members to recuperate immunization defaulters	X				Supervisors and promoters
	Follow –up of CG trainings on Immunization				X	Supervisors and promoters
	Volunteer test				X	Supervisors and promoters
	Malaria Intervention					
IR 1-3	Refresher training of Volunteer CG on Malaria Prevention and Care-Seeking			X	X	Supervisors and promoters
IR 2	Refresher training of CG Religious Leaders on Malaria Prevention and Care-Seeking				X	Supervisors and promoters
IR 2	HBM Training for CHWs (pending approval)				X	Training Officer, CSP Project Manager

IR1 & IR3	Sensitize PDSs, THs and TBAs about danger signs and care seeking through small community level meetings				X	Promoters, Supervisors
	Maintain Bi weekly Home visits on Malaria control activities				X	All staff
	Follow –up Malaria control activities	X	X	X	X	All staff
	Volunteer test				X	
	Meetings & Reporting & Monitoring					
IR 1	Review/Planning Meetings with MOH -+(quarterly) Explain to MOH Health District personnel the CSP project vision. Integrate the CHWs into the Care Groups. Strengthen the partnership with the TPS and the health center head nurses: integrate planning, joint evaluation and analysis of data.	X	X	X	X	CSP Leadership Team
	Quarterly meetings with CSP Partners (NGOs)	X	X	X	X	Training Officer, CSP Project Manager, M&E officer
IR 1	Monthly Meetings with COSAs	X	X	X	X	Supervisors, Promoters
	Biweekly Meetings with Supervisors & Promoters	X	X	X	X	Training Officer, CSP Project Manager, M&E officer
	Monthly C-HIS Reporting to Health Centers and District MOH	X	X	X	X	M&E officer
	Quarterly C-HIS Reporting to Province MOH	X	X	X	X	M&E officer

IR 1-3	Monthly and Annual Reporting	X	X	X	X	CS Project Manager &Supervisors, Promoters& M&E officer , Training officer
	Finalizing Tools and Report format review	X				Training Officer, CSP Project Manager, M&E officer
	Care Group Activity Indicators Data Collection	X	X	X	X	Promoters & supervisors
	Care Group Vital Health Events Data Collection	X	X	X	X	Promoters & supervisors
	Data collection on ITN	X	X	X	X	Promoters & supervisors
	Community Meeting Notes Submission	X	X	X	X	Promoters & supervisors
	Household Visit Data Collection	X	X	X	X	Promoters & supervisors
	Care Group Visit Data Collection	X	X	X	X	Promoters & supervisors
	Monthly Meeting with Promoters, and HC staff to analyze Community Health data	X	X	X	X	Promoters & supervisors
	Quarterly Meetings with Supervisors and TPS to analyze Community Health data	X	X	X	X	M&E officer
	Quarterly Meetings with M&E Officer and District M&E Supervisor to analyze Community Health data	X	X	X	X	Training Officer, CSP Project Manager, M&E officer
IR 1	Community-Health Information System (Analysis)	X	X	X	X	Promoters, Supervisors, M&E Officer
IR 1-3	Annual Retreat (Internal Evaluation)				X	WRB Leadership Team
IR 1-3	Implement Midterm Recommendations	X	X	X	X	CS Project Manager, MCH Specialist
	<u>General Supervision recommendations:</u> 1. Create strategies for follow-up for prenatal care and EPI missing cases. 2. Strengthen the supervision of volunteers both in how they implement home visits as well as in	X	X	X	X	WRB Leadership Team, CSP Project Manager, M&E officer, Training officer, Promoters and Supervisors

	data collection. 3. Identify and train assistant supervisors. 4. Implement in-service training for current supervisors, for example, the use of the supervision grids which were developed in April 2010; supervision strategies. 5. Create supervision grids which are based on the training health promoters have received. 6. When a health promoter needs to be absent for maternity leave or has resigned from WR, divide up the Care Groups she supervised among the other health promoters until she returns from maternity leave or someone else is hired. This will insure that the Care Groups continue to receive supervision and training. 7. Select effective management indicators which can be used internally at WR/Burundi for evaluation purposes. 8. Clarify the scope of the performance contract under which the TPS work in order to avoid paying them twice for supervisory activities. (Currently, they will often park their motorbikes because they have to provide their own gas). Organize supervision visits jointly for field from the Child Survival Project and the TPS. 9. Purchase additional motorbikes so that each CSP promoter has one. There has been an increase in					

	gas usage because they need to share them. 10. Purchase or obtain scales for each promoter to use in PD/Hearth home visits and follow-up. 11. Purchase bikes for each Care Group leader. 12. Increase field supervision visits of WR district and central office to Care Group sites. This will support promoters and volunteers as they can then affirm –W~~W~~hat we are telling you does not come from us."					
	<u>Data Collection recommendations</u> 1. Report evaluation results to the village health committees and also during community meetings. 2. Reinforce the integration of data collection during supervision visits. 3. Create a separate data category for home birth deliveries. 4. Integrate the two community systems: community health workers and WR volunteers. 5. Analyze the quarterly data together with WR and MOH district personnel. 6. Create one HIS system for all health data so that HIS data for specific programs such as HIV/AIDS, TB, Malaria are included in the district monitoring. Currently this data goes directly to the central level. 7. Schedule CSP data collection for similar time	X	X	X	X	WRB Leadership Team, CSP Project Manager, M&E officer, Training officer, Promoters and Supervisors.

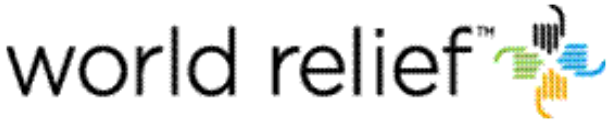
	periods as those used by health facilities as a means to verify accuracy. Example, collect data bi-monthly and compile it monthly. 8. Use collected data to help volunteers make decisions and choose strategies to promote behavior change among their neighbors (idea of finding ~~–e~~arrots"). 9. Encourage staff (promoters, volunteers and community health workers) to use weight graphs as the tool to monitor nutritional changes.					
	Technical Assistance and Trips					
IR 1-3	Visits by World Relief HQ Technical Advisors	X	X	X	X	MCH Specialist, Director of MCH
IR 1-3	Conflict Resolution Trainer		X			MIPAREC Consultant, CSP Team

Annex 5: Rapid Catch Table (Midterm KPC)

INDICATOR	NUMERATOR	DENOMINATOR	PERCENT	95% CONFIDENCE INTERVAL[1]
IMMUNIZATION				
% 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	87	96	90.6%	84.8-96.4%
% of children aged 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%	91.8-99.8%
% of children aged 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%	84.8-96.4%
MATERNAL AND NEWBORN CARE				
% of mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child	83	96	86.5%	79.9-93.3%
% of children age 0-23 months whose births were attended by skilled personnel	78	96	81.3%	73.5-89.1%
% of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within three days after birth	64	96	66.7%	57.3-76.1%
NUTRITION				
% of children age 0-5 months who were exclusively breastfed during the last 24 hours	83	96	86.5%	79.7-93.3%
% of children age 6-23 months fed according to minimum appropriate feeding practices	-	-	-	-
VITAMIN A SUPPLEMENTATION				
% of children age 6-23 months who received a dose of Vitamin A in the last 6 months by card verification or mother's recall	77	96	80.2%	72.2-88.2%
GROWTH MONITORING				
% of children age 0-23 months who are underweight (-2SD for the median weight for age, according to WHO/NCHS reference population)	35	96	36.5%	26.9-46.1%
MALARIA				
% of children age 0-23 months who slept under an insecticide-treated bed net the previous night	62	96	64.6%	55.0-74.2%
% 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%	39.0-59.0%
CONTROL OF DIARRHEA				
% of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution and/or recommended home fluids	75	96	78.1%	69.8-86.4%
WATER AND SANITATION				
% of households of children age 0-23 months that treat water effectively	4	96	4.2%	0.2-8.2%
% of mothers of children age 0-23 months who live in households with soap at the place for hand washing	45	96	46.9%	36.9-56.9%
PNEUMONIA				
% 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%	74.7-89.9%

[1] Confidence intervals calculated using the KPC formula with a design effect of 1, for LQAS, consistent with the CSHGP electronic project data fom.

Annex 6: Midterm KPC Report



Burundi Child Survival Project

Kibuye Health District
Gitega Province
BURUNDI

Rapid Knowledge, Practice and Coverage (KPC) Survey Report For Midterm Evaluation

October 25, 2010

AUTHORS:
Francois Niyitegeka, CSP Manager
Melene Kabadege, WR MCH Regional Technical Advisor
Olga Wollinka, WR MCH Specialist
Melanie Morrow, WR Director of MCH Programs

ACKNOWLEDGMENTS

World Relief Burundi Child Survival Program wishes to acknowledge and thank the following:

Our most sincere thanks are directed to United States Agency for International Development for their fiscal and programmatic support.

The Burundi National Ministry of Health for collaboration in the ending half of the program.

Warm thanks to Kibuye Health District's administrative board and the chiefs of the Health Centers for their active participation in the KPC survey activities at all levels.

Thanks to World Relief Headquarters for their great support, especially in the KPC report development.

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.

SURVEY ORGANIZERS:

Melanie Morrow, Director of MCH
Melene Kabadege, MCH Regional Technical Advisor
Francois Niyitegeka, CSP Manager
Jean-Baptiste Sibomana, M&E Officer
Niyungeko Emile, Training Officer

SUPERVISORS:

Melene Kabadege, MCH Regional Technical Advisor
Francois Niyitegeka, CSP Manager
Niyungeko Emile, Training Officer

INTERVIEWERS:

Iradukunda Eric
Bandyatuyaga Deus
Shamaje Delphin
Nahayo Nestor
Gerard Basabakwinshi
Ntakarutimana Marie
Nitsumutima Benigne
Ndayajemwo Diane
Niyongere Jeanne
Umutesi Josiane
Nzobonimpa M.Paulette
Kigeme Louise
Karerwa Violette
Nimbona Theodora
Nzirarusha Benigne
Ikurakure Revocate
Nshimirimana Agnes
Naze Ninette
Mbonimpa Francois
Ngezahimana Annonciate
Mataratara Spes
Bigirindavyi Alice
Nimbona Donate
Gahimbare J.Z

DRIVERS:
Emmanuel MASABARAGA
Cyriaque NDAYISABA

TABLE OF CONTENTS

ACKNOWLEDGMENTS 1
TABLE OF CONTENTS 3
ACRONYMS 5
I. EXECUTIVE SUMMARY 8
II. BACKGROUND 9
Program Location 9
Target Beneficiary Population 9
Project Goals and Strategic Objectives 10
Intervention-Specific Objectives 10
National Standards and Policies 11
Objectives of the Midterm KPC survey 12
III. PROCESS AND PARTNERSHIP BUILDING 12
IV. METHODS 13
Sampling Design 15
Community Selection 15
Household Selection 16
Interviewer and Supervisor Trainings 17
Data Collection and Analysis 17
V. RESULTS 19
Characteristics of the sample groups surveyed 19
Results for intervention Indicators 20
VI. DISCUSSION 23
Immunization 23
Maternal and Newborn Care 24
Nutrition, Breastfeeding Promotion, and Micronutrients 25
Malaria Prevention and Case management 27
Control of Diarrheal Disease 28
C-IMCI & Pneumonia treatment 29
Comparison of WR CSP Midterm KPC (Feb 2008) and 31
Other Available Data Sources for Key Health Indicators 31
Programmatic implications of the survey findings 31
Community feedback and dissemination of findings 33
APPENDIX A. KIBUYE HEALTH DISTRICT SAMPLING FRAME 34
APPENDIX B. MID TERM KPC SURVEY QUESTIONNAIRES (ENGLISH) 42
0-23 Months 42
0-5 months 55

6-23 MONTHS 59
12-23 MONTHS 64
MALARIA 69
DIARRHEA 74
PNEUMONIA 78

APPENDIX C. MID TERM KPC SURVEY QUESTIONNAIRE (KIRUNDI) 82

0-23 MONTHS 82
0-5 MONTHS 96
6-23 MONTHS 100
12-23 MONTHS 108
DIARRHEA 112
MALARIA 117
PNEUMONIA 123

APPENDIX D. RAW DATA TABLES 127

0-23 MONTHS 127
0-5 MONTHS 137
6-23 MONTHS 139
12-23 MONTHS 151
DIARRHEA 168
MALARIA (FEVER) 172
PNEUMONIA ..... **ERROR! BOOKMARK NOT DEFINED.**

REFERENCES 177

ACRONYMS

ACT	Artesunate Combined Treatment
ANC	Antenatal Care
ARI	Acute Respiratory Infection
ARM	African Revival Ministries
AS-AQ	Artesunate and Amodiaquine
BCC	Behavior Change Communication
BCG	Bacillus Calmette-Guérin vaccine against Tuberculosis
BF	Breastfeeding
BMI	Body Mass Index
BPS	Provincial Health Bureau (*Bureau Provincial de Santé*)
CAM	HC user fee waiver card (*Carte d'assurance de maladie*)
CBO	Community-Based Organization
CG	Care Group
C-HIS	Community Health Information System
CHW	Community Health Worker
C-IMCI	Community-IMCI
CNLS	National AIDS Control Program
COGES	HC drug management committee (*Comité de Gestion*)
COSA	HC staff management committee (*Comité de Santé*)
CS	Child Survival
CSHGP	Child Survival & Health Grants Program
CSP	Child Survival Project
DANIDA	Danish International Development Agency
DGLV	Dark Green Leafy Vegetables
DPT	Diptheria, Pertusis and Tetanus immunization
EBF	Exclusive Breastfeeding
ENA	Essential Nutrition Actions
EPI	Expanded Program on Immunization
EPI-INFO	a public domain statistical software for epidemiology developed by Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia (USA).
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
FMC	Free Methodist Church
FP	Family Planning
FVS	Families Conquering AIDS (*Famille pour Vaincre la SIDA*)
FY	Fiscal Year
GAVI	Global Alliance for Vaccines and Immunizations
GDP	Gross Domestic Product
HBM	Home-Based Management of Fever (suspected malaria)
HC	Health Center
HH	Household
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome

HN-TPO	Health Net-Transcultural Psychosocial Organization
HQ	Headquarters
IDP	Internally Displaced Persons
IFA	Iron Folic Acid
IFRC	International Federation of Red Cross Societies
IMC	International Medical Corps
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
IPT	Intermittent Preventive Treatment
IRC	International Rescue Committee
ITN	Insecticide Treated Net
IUD	Intra-Uterine Device
KHD	Kibuye Health District
KHS	Kibuye Health Sector
KPC	Knowledge, Practices and Coverage Survey
LLITN	Long-Lasting Insecticide Treated Net
LQAS	Lot Quality Assurance Sampling
LRA	Local Rapid Assessment survey
M & E	Monitoring and Evaluation
MCH	Maternal Child Health
MICS	Multiple Indicators Cluster Survey
MIPAREC	Ministry for Peace and Reconciliation Under the Cross CBO
MMR	Measles, Mumps, Rubella Immunization
MOH	Ministry of Health
NGO	Non-governmental Organization
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
OVC	Orphans and Vulnerable Children
PADCO	Planning and Development Collaborative
PBF	Performance-based Financing
PD/Hearth	Positive Deviance/Hearth
PDI	Positive Deviance Inquiry
PEV	Expanded Program on Immunization
PLWA	Person Living With HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission of HIV
PNDS	National Health Plan (*Plan National de Développement Sanitaire*)
PNSR	National Reproductive Health Program (*Programme National Santé de la Reproduction*)
POU	Point-of-use Water Treatment
PPH	Postpartum Hemorrhage
PSI	Population Services International
PVO	Private Voluntary Organization
Rapid CATCH	Core Assessment Tool on Child Health
RFA	Request for Applications
SO	Strategic Objective
SP	Sulfadoxine-Pyrimethamine

STI	Sexually Transmitted Infection

I. EXECUTIVE SUMMARY

The World Relief Burundi Child Survival Project (CSP) conducted a Midterm KPC (knowledge, practice and coverage) survey in September 2010. The survey was conducted throughout the CSP's project area of Kibuye Health District, which is located in the southeastern region of Gitega Province in central Burundi and comprises of four communes: Bukirasazi, Buraza, Itaba, and Makebuko. The survey was designed to assess 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 Burundi midterm 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 include:

Women of reproductive age (15-45)	**38,176**
Children under 5 years of age	**24,376**

The *Ramba Kibondo* CSP has already met or surpassed the following End-of-Project objectives by the Midterm, below we compare baseline and midterm indicator results:

- Use of ORS and/or recommended home fluids for children with diarrhea increased from 43.7% to 78.1%
- Increased fluids for children with diarrhea increased from 32.4% to 67.7%
- Immediate breastfeeding increased from 62.0% to 79.2%
- Household ownership of Long-lasting Insecticide-treated bednets increased from 3.0% to 75.0%
- Use of LLINs by children 0-23 months increased from 8.0% to 64.6%
- Use of ITN/LLINs by pregnant women increased from 32.7% to 66.7%
- Measles vaccine coverage increased modestly from 55.0% to 57.3%
- Suspected pneumonia cases treated appropriately increased from 52.9% to 82.3%
- Knowledge of 2 signs to seek care increased from 62.2% to 86.5%
- Children given anti-malarial medicine for fever within 24 hours increased from 17.1% to 49.0%
- Skilled attendants at birth increased from 60.3% to 81.30%
- Post-natal visit increased from 32.7% to 66.7%

This indicator shows progress but target not yet met:

- Households both with presence of soap and maternal hand-washing at appropriate times (increased from 18.0% to 38.5%); Target 70%.
- DPT 3 coverage *by card* increased from 61.0% to 62.5% (by card *or recall*, DPT3 coverage changed from 73.5% to 90.6%). Target: 80% *by card*.

These indicators were largely unimproved:

- Continued feeding during diarrhea episode decreased from 63.4% to 42.7%
- % of children 0-23 years old who were underweight increased from 16% (CI 6-26%) to 36.5% (see discussion).

- Effectively treating water in households minimally increased from 1% to 4.20%.

The following indicator was not measured:

- Infants and young children 6-23 months fed according to minimum appropriate feeding practices.

II. BACKGROUND

- Presence of soap at handwashing station decreased from 53% to 46.90%, but this is not a statistically significant change.

Burundi is a 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[i]. Burundi is one of the ten poorest countries in the world. Due to Burundi's civil war, poverty increased. Burundi is ranked 167 out of 177 countries in the 2008 Human Development Index[ii].

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[iii]. Data from a 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 births[iv].

Program Location

The Burundi CSP is based in southeastern Gitega Province in central Burundi. Gitega has an estimated population of 847,400 in 11 communes[v]. The project area includes the *274 sucollines* included into 85 *collines,* organized into four communes, which together make up the Kibuye Health District: Makebuko, Itaba, Bukirasazi and Buraza. The district's population is estimated to be 198,516[vi]

Target Beneficiary Population

The project targets women of reproductive age (defined as women 15-45 years of age in Burundi) and children under the age of five. Based on the population data from the time of the DIP, the project area included the following beneficiary population:

Women of reproductive age (15-45)	**38,176**
Children under 5 years of age	**24,376**

Project Goals and Strategic Objectives

The project's goal is 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 aims to achieve this goal through 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.

Intervention-Specific Objectives

1. **Malaria Prevention and Case Management**
    - *60% of children with fever (suspected malaria) will receive appropriate anti-malarial treatment within 24 hours.*
    - *50% of households with a child 0-23 months will own at least one LLIN.*
    - *50% of children 0-23 months will have slept under an LLIN or ITN (treated within the past 6 months) the previous night.*
    - *50% of women with a child 0-23 months will have slept under an ITN while they were pregnant with their youngest child.*

2. **Nutrition including Breastfeeding Promotion and Vitamin A**
    - *75% of newborns will be immediately breastfed within one hour of delivery, and will receive no pre-lacteal feeds.*
    - *50% of children 6-23 months will be fed according to minimum appropriate feeding practices.*
    - *60% of children who completed the Hearth program achieve sustained adequate or catch-up growth for at least two months following completion of Hearth session.*

3. **Control of Diarrheal Disease**
    - *70% of mothers of children age 0-23 months will wash hands with soap or soap-substitute at least two of the appropriate times.*
    - *70% of children with diarrhea in the past two weeks will receive ORS and/or ORT with recommended home fluids.*
    - *70% of children with diarrhea in the past two weeks will be offered more fluids than usual during the illness.*
    - *80% of children with diarrhea in the past two weeks will be offered the same amount or more food during a diarrheal illness.*

4. **Immunization**
    - *80% of children 12-23 months will be immunized with DPT1.*
    - *80% of children 12-23 months will be immunized with DPT3.*
    - *80% of children* 12-*23 months will be immunized against measles.*

5. **Cross-Cutting:**
    - *80% of mothers of children 0-23 months will know two or more danger signs for seeking* immediate care when their child is sick[vii].

National Standards and Policies

Health Services

There are 11 health centers (HCs) in Kibuye Health District (KHD). Nine HCs are MOH-affiliated and managed, while two HCs are private, mission-run facilities operated separately by the Catholic and Free Methodist Churches. HCs 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 (FMC) of Burundi, is the referral center for all 11 HCs in KHD. Health Net-TPO is supporting the province in implementation of performance based financing in heath indicators; this helps motivate staff by increasing salaries of health personnel. 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 free of charge for children under five and childbirths. This initiative has contributed to increased use of health services[viii].

Immunizations

The standard immunization regimen for infants in Burundi includes the GAVI-supported pentavalent vaccine, as well as BCG, polio pentavalent, and measles. The 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-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 seeks a 25% reduction in malaria incidence 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 Artesunuate and Amodiaquine (AS-AQ). ITNs which are not LLINs have been prohibited in Burundi since 3 years ago. LLIN distribution has two channels: firstly through mass campaign distribution, and secondly in the health centers either after delivery or during the first trimester of antenatal care.

Objectives of the Midterm KPC survey

This survey was conducted during the period of 27 September through 30 September 2010 as part of a midterm evaluation for the "Rambakibondo" Child Survival Project (CSP) sponsored by USAID and World Relief.

The purpose of the survey is to measure progress toward project goals by comparing results from this midterm survey with data collected in 2007 at the baseline. 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.

III. 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 and Provincial levels in the planning and the implementation of KPC Survey. World Relief staff such as CSP staff and MCH Regional Technical Advisor was also involved.

The Province and District Health provided staff to participate in interviewer training. The staff was very active and had contributed a lot to update questionnaires and to organize

data collection. They also equipped surveyors with 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 and also participated in the surveyor training preceding the data collection. As the survey was conducted through the community, local leaders in collaboration with program volunteers also guided the surveyors. Without the involvement of the local leaders and health center staff it would not be easy to identify the delimitation of each sub collines (small geographical unit for data collection, given that we were using Lot Quality Assessment techniques, rather than the typical 30 cluster methodology).

Unfortunately involvement of the Ministry of Health at central level was not possible because the timing coincided with their period for annual reporting. Also, as the project had not had a permanent manager for the year leading up to the survey, activities did not run as smoothly as would be expected under stronger leadership.

IV. METHODS

Since the CSP Project began in 2007, the design of the Midterm KPC questionnaires was based on the KPC 2007 modules[ix] and LQAS protocol for Parallel Sampling including Rapid CATCH 2007 indicators[x] as well as project indicators. In the case of Rapid CATCH 2007, seven questionnaires were needed. A separate questionnaire for each sample was developed. Each questionnaire had 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 Midterm questionnaire was consistent with the Baseline survey questions though with the addition of two more questions. One was related to when ITN was obtained, to identify LLINs that were distributed in the 3 last years (previously, nets sold might not have been LLINs). Another question was regarding Nutritional Status, to facilitate the analysis and estimate of underweight children. The composition of each questionnaire was as following:

- *The surveyor team started with Questionnaire1 that has 33 questions for mothers of children 0-23 months. Those questions were relevant to all mothers with children under the age of two This survey included sections for Maternal and Newborn Care; Illness recognition; Water and sanitation, Malaria prevention, with Anthropometrics.*

- *Questionnaire2 with 6 questions for mothers of children 0-5 months. Includes section for breastfeeding.*

- *Questionnaire3 with 9 questions for mothers of children 6-23 months. Includes sections for Nutrition and Vitamin A supplementation.*

- *Questionnaire4 with 13 questions for mothers of children 12-23 months. Includes sections for Immunization.*

- *Questionnaire5 with 7 questions for mothers of children 0-23 months experiencing diarrhea in the last two weeks. Includes sections for Control of Diarrhea.*

- *Questionnaire6 with 6 questions for mothers of children 0-23 months experiencing pneumonia in the last two weeks. Includes section for Pneumonia treatment.*

- *Questionnaire7 with 8 questions for mothers of children 0-23 months experiencing fever/malaria in the last two weeks. Includes section for Fever/ malaria treatment. (*See the 7 Midterm KPC questionnaires in Annex 1)

The questionnaires were developed by CSP team led by MCH Regional Technical Advisor and reviewed by the WR Director of MCH. 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 Gitega on September 20-24, 2010. It was also tested in the two sub collines, Nyarugongo and Gahororo, of Giheta colline, and Gitega Commune in Gitega Province. The geographic area where questionnaires were tested is neighboring Kibuye District, which has a similar socio economic and geographic context to Kibuye District. After 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.

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:

a. Sampling interval in Bukirasazi = $\frac{\text{Total survey population (30,818)}}{\text{Total number of sub collines (24)}} = 1284$

a. Sampling interval in Buraza = $\frac{\text{Total survey population (41667)}}{\text{Total number of sub collines (24)}} = 1736$

b. Sampling interval in Itaba = $\frac{\text{Total survey population (53539)}}{\text{Total number of sub collines (24)}} = 2231$

c. Sampling interval in Makebuko = $\frac{\text{Total survey population 52572)}}{\text{Total number of sub collines (24)}} = 2195$

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. For more details see Appendix A.

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 proceded 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 24 interviewers were recruited from CSP Staff, Kibuye Health District and Province offices. The 24 interviewers included: four TPS, 2 HC staff sent from the Health District, 2 staff from the Health Province, 14 out of 24 promoters and 2 out of the four CSP supervisors. They did participate to the survey as interviewers; the remaining CSP staff who did not participate in the survey were either on leave or doing data entry.

Four supervisors included the Program Manager, M&E Officer and Training officer, and MCH Regional Technical Advisor. Supervisors were trained for three days. The training facilitator was the MCH Regional Technical Advisor. The main topics for supervisor training included: review of the questionnaires for seven sample groups; Review random methodology and how to select sous colline by using sampling interval in order to get a sample of 24 souscollines to be included in the survey per Commune; discussions on methodology for household and respondent selection; discussions on data collection process; set up schedule, topics, training sessions and appropriate methodologies for interviewer training; and discussion on supervision methodology such as follow up data collection, coding and providing support to interviewers.

The interviewer training was conducted from 21 to 24 September 2010. The four day workshop covered the following points: KPC survey Objectives and principles, LQAS parallel sampling methodology, basic techniques of interview, how to select the first and subsequent households; and review and practice interview for each questionnaire. The training started with a pre-test and ended with a post-test and the evaluation of the all the sessions.

The pre-testing of the questionnaires took place in colline Giheta of Gitega commune located outside the survey zone. This provided to the interviewers with an additional opportunity to practice conducting the survey and coding responses on the survey form. It also gave the occasion to the supervisors to practice 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 as well as 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.

Although there were four survey supervisors, only three followed up on data collection because the M&E Officer got sick just after the training and did not participate to the data collection. Each of the remaining three supervisors worked in one supervision area, and on the fourth day they worked together in the fourth commune, Makebuko. Interviewers in Makebuko were divided into three supervision groups. On each survey day, the three 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 consisted of the 6 WR CSP staff as follows: Training Officer, Program Manager, 2 Promoters and 2 CSP Supervisors oriented by MCH Regional Technical Advisor. Double data entry was used to facilitate quality control with regard to data entry. The data were analyzed in EPIINFO program version 3.2.2 and 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.

V. 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.

Figure 1: Sample Group 0-23 months
Distribution of children by age

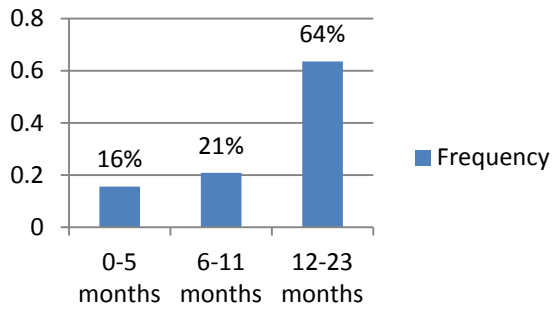


Figure 2: Sample Group 0-5
Distribution of children by sex

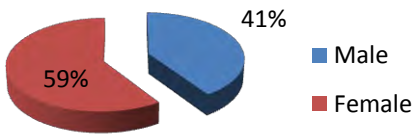


Figure 3: Sample group 6-23 months
Distribution of children by Sex

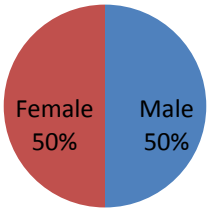
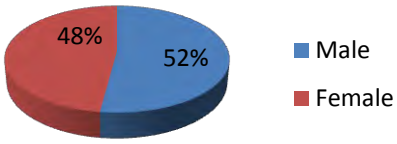


Figure 4: Sample group 12-23 months
Distribution of children by Sex



Indicator Results

Table 2: Rapid Catch Indicator Table (Midterm KPC)

INDICATOR	NUMERATOR	DENOMINATOR	PERCENT	95% CONFIDENCE INTERVAL[2]
IMMUNIZATION				
% 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	87	96	90.6%	84.8-96.4%
% of children aged 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%	91.8-99.8%
% of children aged 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%	84.8-96.4%
MATERNAL AND NEWBORN CARE				
% of mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child	83	96	86.5%	79.7-93.3%
% of children age 0-23 months whose births were attended by skilled personnel	78	96	81.3%	73.5-89.1%
% of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within three days after birth	64	96	66.7%	57.3-76.1%
NUTRITION				
% of children age 0-5 months who were exclusively breastfed during the last 24 hours	83	96	86.5%	79.9-93.3%
% of children age 6-23 months fed according to minimum appropriate feeding practices.	--	--	-	-
VITAMIN A SUPPLEMENTATION				
% of children age 6-23 months who received a dose of Vitamin A in the last 6 months by card verification or mother's recall	77	96	80.2%	72.2-88.2%
GROWTH MONITORING				
% of children age 0-23 months who are underweight (-2SD for the median weight for age, according to WHO/NCHS reference population)	35	96	36.5%	26.9-46.1%
MALARIA				
% of children age 0-23 months who slept under an insecticide-treated bed net the previous night	62	96	64.6%	55.0-74.2%
% 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%	39.0-59.0%
CONTROL OF DIARRHEA				
% of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution and/or recommended home fluids	75	96	78.1%	69.8-86.4%
WATER AND SANITATION				
% of households of children age 0-23 months that treat water effectively	4	96	4.2%	0.2-8.2%
% of mothers of children age 0-23 months who live in households with soap at the place for hand washing	45	96	46.9%	36.9-56.9%
PNEUMONIA				
% of children age 0-23 months with chest-related cough	79	96	82.3%	74.7-89.9%

[2] Confidence intervals calculated using the KPC formula with a design effect of 1, for LQAS, consistent with the CSHGP electronic project data fom.

and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider				

INDICATOR	Baseline KPC	Midterm KPC results	PROJECT TARGET
% of mothers of children age 0-23 months who wash hands with soap at two or more appropriate times	**18.0%**	**38.5%**	**70.0%**
% of children 0-23 months with diarrhea who are offered increased fluids	**32.4%**	**67.7%**	**70.0%**
% of children 0-23 months with diarrhea who received continued or increased feeding	**63.4%**	**42.7%**	**80.0%**
% of children 0-23 months with diarrhea who receive oral rehydration solution and/or home recommended fluids	**43.7%**	**78.1%**	**70.0%**
% of children age 6-23 months fed according to a minimum of appropriate feeding practices	**25.6%**	**-**	**50.0%**
% of children who were immediately breastfeed with no pre-lacteal feeds	**62.0%**	**79.2%**	**75.0%**
% of 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*	**NA**	**57.1%**	**60%**
% of households with a child 0-23 months who own an LLITN	**3.0%**	**75.0%**	**50.0%**
% of children age 0-23 months who slept under an LLITN or	**8%**		**50.0%**

Table 3. Summary of Project Indicators and Targets* for Baseline and Midterm

an ITN treated within the past 6 months the previous night		**64.6%**	
% of women who slept under an ITN during last pregnancy	**32.7%**	**66.7%**	**50.0%**
% 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	**17.1%**	**49.0%**	**60.0%**
% of children aged 12-23 months who received measles vaccine according to the vaccination card by the time of the survey	**55.1%**	**57.3%**	**80.0%**
% of children aged 12-23 months who received DTP1 / PENTAVALENT1 according to the vaccination card by the time of the survey	**62.5%**	**63.5%**	**80.0%**
% of children aged 12-23 months who received DTP3 / PENTAVALENT 3 according to the vaccination card by the time of the survey	**61.0%**	**63.5%**	**80.0%**
% of mothers of children age 0-23 months who know at least two signs for seeking immediate care when their child is sick	**62.2%**	**86.5%**	**80.0%**

**This table includes all intervention specific project indicators and targets, some of which are the same as Rapid Catch 2007 indicators.*

VI. DISCUSSION

Immunization

Table 4: RAPID CATCH Indicators - Immunization

INDICATOR	NUMERATOR	DENOMINATOR	PERCENT	95% CONFIDENCE INTERVAL
IMMUNIZATION				
% 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	87	96	90.6%	84.8-96.4%
% of children aged 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%	91.8-99.8%
% of children aged 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%	84.8-96.4%

When we used the Rapid CATCH indicator definition of ~~"a~~s checked by vaccination card or mother's recall," immunization rates were found to be substantially higher than the rates calculated using the project indicator definition of ~~"a~~s checked by card." These rates are slightly better than the KPC baseline rates that were low, and the difference between the two types of indicators was very high.

Table 5: Project Indicators - Immunization

Indicator	Baseline KPC%	Midterm KPC%	EOP Target
Immunization			
% of children aged 12-23 months who received measles vaccine according to the vaccination **card** by the time of the survey	**55.1%**	57.3%	**80.0%**
% of children aged 12-23 months who received DTP1 / PENTAVALENT1 according to the vaccination **card** by the time of the survey	**62.5%**	63.5%	**80.0%**
% of children aged 12-23 months who received DTP3 / PENTAVALENT 3 according to the vaccination card by the time of the survey	**61.0%**	63.5%	**80.0%**

The project objectives for immunization are based on evidence by card. Because verification by card dictates that the denominator includes all children of the appropriate age group (not just those with cards), and only 66.7% of children had cards, the highest verifiable coverage by card would have been 66.7%. Almost all children received cards (97.9%) at some point but retention of cards was an issue.

According to data from the UNICEF BURUNDI web site[xi], the 2008 estimate national coverage for Immunization of the two antigens is closer to the results incorporating mother's report (Rapid CATCH definitions) The 2008 estimate rates are 84%, 99% and 92% respectively for Measles, DPT1 and DPT3, including corresponding vaccines.

Maternal and Newborn Care

Table 6: RAPID CATCH Indicators- Maternal and Newborn Care

INDICATOR	NUMERATOR	DENOMINATOR	PERCENT	95% CONFIDENCE INTERVAL
MATERNAL AND NEWBORN CARE				
% of mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child	83	96	86.5%	79.7-93.3%
% of children age 0-23 months whose births were attended by skilled personnel	78	96	81.3%	73.5-89.1%
% of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within three days after birth	64	96	66.7%	57.3-76.1%

Midterm results indicate significant improvements for indicators concerning TT Vaccines, delivery with a trained providers and post natal visits. Baseline results show that just over half or 52.3% (46.5-58.1%) of mothers of children age 0-23 months received two or more tetanus toxoid vaccinations before the birth of their youngest child, whereas the midterm KPC found 86.5% TT coverage. Skilled personnel attending the birth improved from 60.3% (54.6-65.9%), of children age 0-23 months at baseline, to 81.3% by the Midterm. At baseline, only 32.7% (27.4-38.3%) of babies received a post-natal visit from an appropriate trained health worker within three days after birth, whereas the midterm found that 66.7% did so.

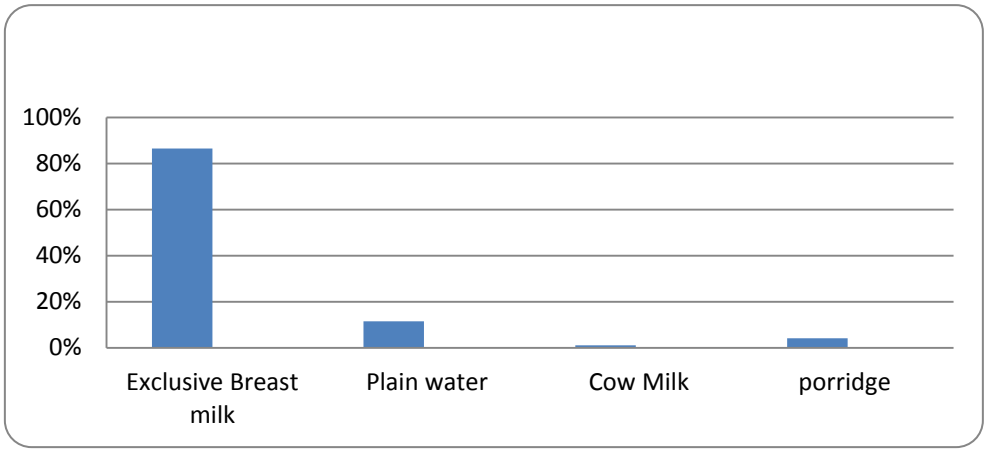
The apparent improvement is very encouraging; it is probably due to the intensive community mobilization effort for behavior change, as well as improvements in service delivery. Antennal care is one of the performance-based financing (PBF) indicators, and health facility delivery is free of charge since last year, so there has been a significant increase in use of maternity services. Additionally, during the antenatal checkup pregnant women receive LLITNs. All of those –carrot strategies" have contributed to enhance maternal and newborn care in Kibuye Health District and the country. However there still is room to improve.

Nutrition, Breastfeeding Promotion, and Micronutrients

Table 7: Project Indicators – Nutrition & PD/Hearth

The percent of children who received vitamin A supplements was maintained (the baseline found an already-high prevalence of 81%). This is beyond the end-of-project target of 80%. This high rate of Vitamin A distribution in children is due to mother child health week campaigns and vaccination campaigns combined with LLIN distribution which has a high demand in the population.

Figure 3: Exclusive Breastfeeding



Among the 96 children 0-5 months surveyed, 83children (86. 5%; 95% CI: 79.7-93.3%) were exclusively breastfed during the last 24 hours based on mothers' recall. Breastfeeding within the first hour of birth and without any prelacteal feeds increased from 62.0% to 79.2% (76 out of 96 children 0-5 months). Those results are consistent with those of the baseline KPC survey which indicated that breast feeding practices were better than expected in the CSP area.

Table 8: Feeding practices (a)

Indicator	Baseline KPC%	Midterm KPC%	EOP Target

% of children age 6-23 months fed according to a minimum of appropriate feeding practices	25.6%	-	50.0%
% of children age 6-23 months fed a minimum number of food groups	-	86.5%	N/A
% of children who were put to the breast within the first hour with no pre-lacteal feeds	62.0%	79.2%	75.0%
% of children who completed the Hearth program achieve sustained adequate (200-600 grams)or catch-up (over 700 grams) growth for at least 2 months after Hearth	NA	57.1%	60%
% of children age 0-23 months who are underweight (-2SD for the median weight for age, according to WHO/NCHS reference population)	16.4%	36.5%	N/A

Infant feeding leaves considerable room for improvement, as evidenced by the high proportion of underweight children. Early initiation of breastfeeding increased (79.2% Midterm KPC relative to 62.0% at Baseline). Breastfed children were given a good variety of foods; 86.5% were fed one food from at least 3 different additional food groups. However, all non-breastfeeding children (7/7) in the 6-23 months age group failed to be fed at least one food from 4 or more different food groups, as they should be according to the minimum of appropriate feeding practices. Meal frequency was not measured in this survey. Milk products were not consumed in many families.

Table 8: Feeding practices (b)

Feeding Practices	Frequency	Percent	Cum Percent
A. Breastfed children drinking or eating at least one food of each three or more food groups	83	86.5%	86.5%
B. Breastfed children drinking or eating at least one food of less than three food groups	6	6.3%	92.8%
D. Non breastfed children not drinking milk and NOT eating at least one food from each 4 groups as recommended	7	7.3%	100.00%
Total	96	100.00%	100.00%

These findings are consistent with the information from UNICEF website indicating the % of Burundian children 6-9 months who are breastfed with complementary food at 88%. The low coverage of family planning methods is the leading factor for interrupting breastfeeding and abrupt weaning. Contraceptive Prevalence is estimate at 9% (UNICEF, 2008).

The greatest worsening of project indicators was in the prevalence of underweight children 0-23 months. The prevalence of malnourished children actually increased from 16.4% (Confidence Interval 6-26%) at the baseline, to 36.5% at the Midterm. However, this is consistent with UNICEF estimates for 2008, which showed 39% of children were moderately and severely underweight for age (NCS/WHO).

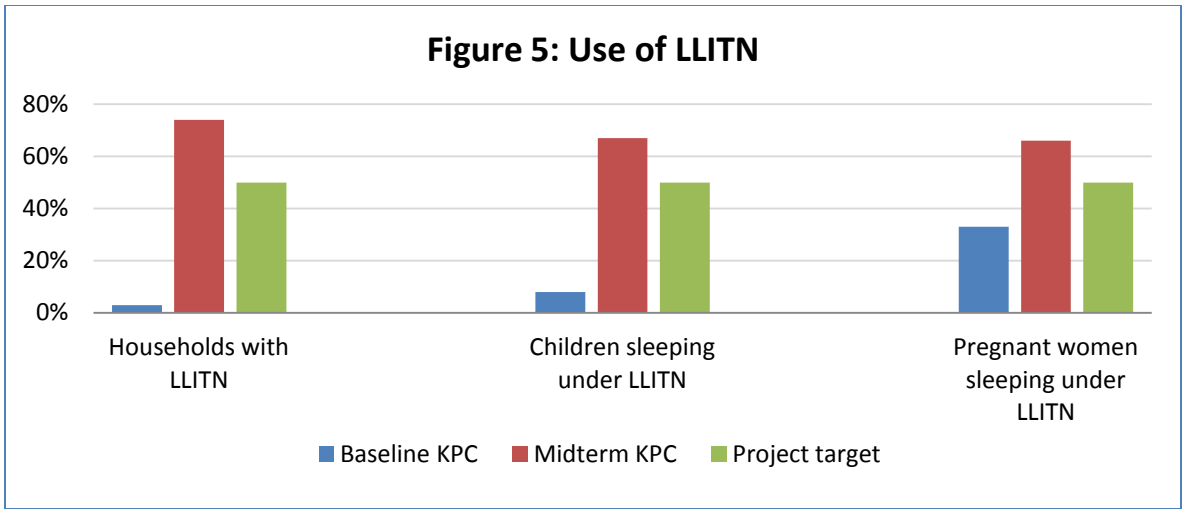
Possible factors influencing the decline in nutritional status include the following:

- Seasonality: the Midterm KPC was conducted in September; it is known that September to October is a lean season in Burundi, with seed remaining from the prior harvest used for replanting. By contrast, the baseline was done in April.
- UNICEF reports that ~~–as~~ of September 2008, more than 47,000 Burundians had been repatriated from Tanzania since 2002, with the highest number –over 91,000- in 2008 alone."
  (Source:http://www.unicef.org/infobycountry/burundi_statistics.html).

Assuming that this repatriated population is not yet well settled to be self sufficient for household's food security; we cannot exclude this phenomenon from the factors affecting the nutritional status of children in the CSP zone.

PD/Hearth data is not collected via the household KPC survey but does contribute to the project's nutrition indicators. PD/HEARTH program is an effective strategy to rehabilitate malnourished children and prevent malnutrition in future siblings. Among the children with moderate malnutrition who are in PD/hearths, the percentage of those achieving adequate or catch up growth (57.1%) two months following Hearth is close to the target of 60%. These data are for two cycles of PDH implementation. The CSP team has planned refresher trainings on PD/Hearth implementation for CSP staff as well as project volunteers, before the coming PD/Hearth sessions in order to meet the target objective and to impact positively on underweight malnutrition.

Malaria Prevention and Case management



Substantial increases in ITN use are observable in CSP area and surpass the EOP target of 60% use among children under 0-23, which is consistent with RBM Abuja targets for ITN use. A high proportion of households (72 out of 96: 75.0%) reported owning an LLITN. This is a significant improvement over the 3.0% at baseline. Health facilities have been distributing LLITN over the past three years (and the government has also taken non-treated nets off the market). The project helped with community distribution last year. Sixty-two out of 96 children surveyed (64.6%; 95% CI: 55.0-74.2%) slept under an LLIN the previous night (up from 8.0% at baseline). Among mothers of children 0-23 months, 64 out of 96 mothers (66.7%) reported sleeping under an ITN all or most of the time during the pregnancy with their youngest child.

The proportion of households that *own* an LLITN increased from 3% to 75% whereas that of children age 0-23 months that slept under an ITN/LLITN the night before the survey moved from 8% to 64.6%. The project Midterm achievement is much higher than the country's overall estimation of 8% for children under five years of age sleeping under the ITN (UNICEF, 2009).

The EOP target for malaria treatment is consistent with RBM Abuja target for case management: at least 60% of all children with a febrile episode will receive treatment with an effective anti-malarial drug within 24 hours. At the Midterm KPC, 47 out of 96 mothers (49.0%) who reported that their child had experienced a fever in the past two weeks said the child received an anti-malarial within 24 hours of the onset of fever. This is a significant increase from 17.1% at the 2008 baseline KPC.

Control of Diarrheal Disease

Table 8: Hand Washing & Diarrhea case management

Indicator	Baseline KPC%	Midterm KPC%	EOP Target
% of mothers of children age 0-23 months who wash hands with soap at two or more appropriate times	**18.0%**	38.5%	**70.0%**
% of children 0-23 months with diarrhea who were offered increased fluids	**32.4%**	67.7%	**70.0%**
% of children 0-23 months with diarrhea in the prior two weeks who received oral rehydration solution (ORS) and/or recommended home fluid during illness	**43.7%**	78.1%	**70%**
% of children 0-23 months with diarrhea who received continued or increased feeding	**63.4%**	42.7%	**80.0%**

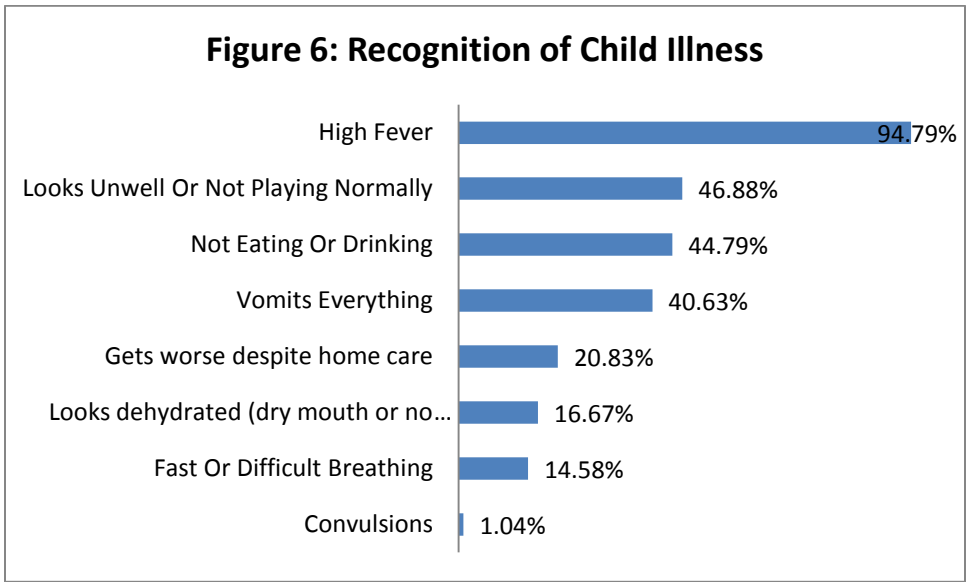
The above table indicates that the percent of mothers of children age 0-23 months who wash hands with soap at two or more appropriate times increased from 18.0% to 38.5% per baseline and midterm surveys results. This doubled within a period of 3 years which shows that these practices are being adopted at a high pace. However, we are far from the desired target (70%) at the end of the project and significant efforts still need to be invested to encourage the adoption of this behavior at household level.

A steady increase was observed in the % of children 0-23 months with diarrhea who were offered increased fluids (67.7%), and that of children 0-23 months with diarrhea who received oral rehydration solution and/or home recommended fluids (78.1%), the latter surpassing the 70% EOP target. However, despite this encouraging behavior change related to the increase of fluids in children with diarrhea, the survey revealed a drop of more than 20% in the percent of children 0-23 months with diarrhea who received continued or increased feeding with reference to the results of the baseline KPC survey.

One major strategy reducing diarrhea diseases is to treat water in order to make it safe for drinking. The results show that no significant effort to clean water is deployed. Mothers do not use appropriate ways to make water safe or are not aware of the methods such as to add bleach/chlorine, solar disinfection, water filter or to boil water. Thirty-seven out of 96 mothers of children 0-23 months (38.5%) do not do any treatment for water collected. Only 4 out of 96 (4.2%; 95% CI 0.2-8.2%) are using appropriate ways to clean water. That is a very low rate and requires much attention. The project should reinforce BCC messages and support families to adopt simple ways to clean water with local resources.

C-IMCI & Pneumonia treatment

The complete package of C-IMCI is not implemented in Burundi; authorization from the MOH is needed in order to implement community case management. However the project contributed to increased awareness of signs of child illness among families.



The percentage of mothers of children age 0-23 months who know at least two signs for seeking immediate care when their child is sick increased from 62.2% (Baseline KPC) to 86.46% (Midterm KPC)

"High fever" was the first sign of child illness recognized by mothers (94.79%); "looks unwell or not playing" (46.88%) was the second sign known. However, it is concerning that convulsion was identified by few mothers of children 0-23 months as a danger sign, given the severity of the condition. According to the Kibuye Health District HIS, malaria is a leading cause of illness and death for children uder five in the project area as well as the country as a whole.

The 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 significantly increased from 52.9% (Baseline KPC) to 82.3% (MTE KPC). The increase of sick child care at health facility is high. The contributing factors could be household education conducted by volunteers; it is also helpful that treatment for children is free of charge (although this has been the case since 2009).

Comparison of WR CSP Midterm KPC (September 2010) and Other Available Data Sources for Key Health Indicators

Indicator	KPC 2008	KPC 2010	National Statistics	REFERENCE
2 week prevalence of fever (children 12-23 months)	37.0%	53.1%	43%	WFP 2006
Underweight children (0-23 months)	16.4%	36.5%	39%	UNICEF (2008)
Exclusive breastfeeding (infants 0-5 months)	86.4%	86.5%	45%	UNICEF 2007
Mothers of children (0-5 months) who initiate breastfeeding within the first hour after delivery	64.0%	83.3%	50%	C-IMCI 2006
2 week diarrhea prevalence (0-23 months)	23.7%	46.9%	17%	WFP 2006
Children (0-23 months) with diarrhea treated with ORS or a salt-sugar solution	40.8%	78.1%	23%	UNICEF (2008)
Children (0-23 months) with diarrhea are given less to drink	46.5%	18.8%	32%	WFP 2006
Children (0-23 months) with diarrhea given less to eat	67.4%	57.3%	75%	WFP 2006
Percent of children 0-23 months with suspected pneumonia taken to an appropriate health provider	52.9%	82.3%	38%	UNICEF (2008)
ITN use (0-23 months)	8.0%	64.6%	8%	UNICEF (2008)
Household ITN ownership	3.0%	75.0%	8%	UNICEF (2008)
Children with fever receiving an effective anti-malarial drug within 24 hours	17.1%	49.0%	30%	UNICEF (2008)
DTP1 vaccination coverage among 12-23 months (KPC data by card or *recall*)	94.9%	95.8%	99%	UNICEF (2008)
Measles vaccination coverage among 12-23 months (KPC data by card or *recall*)	89%	90.6%	84%	UNICEF (2008)
DPT3 vaccination coverage among 12-23 months (KPC data by card or *recall*)	73.5%	90.6%	99%	UNICEF (2008)
Children 12-23 months of age who received Vitamin A supplementation	89%	80.2%	80%	UNICEF (2008)
Proportion of births attended by skilled health personnel	60.3%	81.3%	34%	UNICEF (2008)

Programmatic implications of the survey findings

The project will adapt present strategies in order progress towards project objectives consistent with MDG are as follows:

Despite the encouraging behavior change related to the increase of fluids in children with diarrhea, the survey revealed a drop of more than 20% in the percent of children 0-23 months with diarrhea who received continued or increased feeding with reference to the results of the baseline KPC survey. BCC messages should emphasize on this practice by promoting active feeding during child illness.

The proportion of children 0-23 months who are underweight (-2SD for the median weight for age, according to WHO/NCHS reference population) is quite high (36.5%). The proportion of children who completed the Hearth program and achieved or maintained adequate growth or catch-up at least 2 months, is good (57.1%) . The project will implement other PD Heart sessions for 2011 FY and continue to follow up PD hearth activities including refresher trainings to promoters and Light Mothers (volunteers); checking on the accuracy of menus calculation, the quality of messages delivered by Light Mothers and the precision of anthropometric measures reported for children; emphasizing home visits to participant families in order to encourage continued child feeding practices mainly for under-five non breastfed children; and promoting food security at home (including legumes as a source of protein) by initiating income generating activities among PD/Hearth beneficiaries such as kitchen garden, and animal husbandry.

The proportion of households of children 0-23 months that treat water effectively is very low (4.2%). The project plan is to promote PSI product:"Sur'Eau" for cleaning water and negotiate community based distribution through the project's volunteer network. The product was not available at the onset of the CSP but is now available, despite being unpopular. The project will intensify BCC messages on water treatment through multiple channel such as community meetings, churches, and care group volunteer meetings.

With regard to hand washing, the proportion of mothers who live in households with soap at the place for hand washing is also low (46.9%). By observation, only 10.4% households managed to have a place for hand washing inside/near Kitchen or cooking place. The project plans to promote local tippytap as a hand washing station where soap or ash will be kept available.

Case management for fever/malaria still leaves room for improvement; only 49.0% children with a fever were treated with an effective anti malarial drug within 24 hours. To address this issue, the project will be more involved in meetings with MOH and partners in order to speed up the process of implementation of fever/malaria home based management.

Community feedback and dissemination of findings

The full baseline KPC survey report will be shared with all partners, Kibuye Hospital and the national, provincial and district levels of the MOH. It is hoped that this report will help to stimulate discussion among partners by providing a new source of local data on community health in Kibuye and by promoting standardization of indicator definitions across implementing agencies and in accordance with international norms.

This Midterm KPC survey report will be shared with project staff including promoters, supervisors, and officers in order to plan accordingly activities for FY 2011.Through community meetings, community works and Care group meetings; Local Leaders, Church Leaders, Volunteers and Community members o will get feedback on the results by highlighting progress and the areas requiring improvement. Feedback will be done with simple graphs easily understood by community members.

APPENDIX A. KIBUYE HEALTH DISTRICT SAMPLING FRAME

Population figures for each commune provided by Commune Adminsitrators
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.

1. COMMUNE BUKIRASAZI

Colline	Sbcolline	NK	Population	Cumulative Population			
	Bukirasazi	15	2082	2082	1706	1	
	Muremera	4	429	2511			
Bukirasazi	Nyabiziba	5	565	3076	2990	2	1706
	Kinanari	5	659	3735			1284
	Rwatwenzi	6	486	4221			2990
Buhanda	Muvumera	6	693	4914	4274	3	1284
	Bunyuka	7	702	5616	5558	4	4274
Bunyuka	Kamusase	4	558	6174			1284
	Gakindo	5	579	6753			5558
	Kiramba	5	460	7213	6842	5	1284
Gasongati	Gasongati	7	743	7956			6842
	Kibere	10	1218	9174	8126	6	1284
Kibere	Kayenzi	7	865	10039	9410	7	8126
	Bijo	10	880	10919	10694	8	1284
	Kirambi	7	831	11750			9410
	Murambi	9	954	12704	11978	9	1284
Kibuye	Muringa	6	605	13309	13262	10	10694
	Buraza	3	419	13728			1284
	Muyaga	3	448	14176			11978
Migano	Nyabuhoro	2	280	14456			1284
	Gikobe	5	523	14979	14546	11	13262
	Gikombe	3	265	15244			1284
	Kidida	5	808	16052	15830	12	14546
Mpingwe	Kinyonza	5	416	16468			1284
	Nunga	7	514	16982			15830
Nyambuye	Nyambuye	8	588	17570	17114	13	1284
	Kivumu	4	556	18126			17114
	Mihama	10	1150	19276	18398	14	1284
	Nyamisure	1	246	19522			18398
Nyamisure	Nyamugari	8	943	20465	19682	15	1284
	Cogo	6	871	21336	20966	16	19682
Rugabano	Magamba	2	444	21780			1284

	Rugabano	6	776	22556	22250	17	20966
	Gatongati	5	550	23106			1284
	Kiryama	4	493	23599	23534	18	22250
Rugoma	Mwambi	4	534	24133			1284
	Rima	4	423	24556			23534
Ruhinda	Ruhinda	8	597	25153	24818	19	1284
	Kamanda	14	1445	26598	26102	20	24818
	Jondi	6	640	27238			1284
Rukoki	Rukoki	5	564	27802	27386	21	26102
	Gihogoro	3	305	28107			1284
	Nyamurenge	3	406	28513			27386
Ruvumu	Ruhwama	4	494	29007	28670	22	
Rwinyana	Rwinyana	5	792	29799			
Shaya	Shaya	4	390	30189	29954	23	
	Gatumba	3	279	30468			
Tema	Gishanga	3	350	30818	30800	24	

TOTAL POPULATION IN BUKIRASAZI = 30, 818

Sampling Interval = 1284
Random Number = 1706

2. COMMUNE BURAZA

Colline	Sbcolline	NK	Population	Cumulative Population			
	Kabaragaza	7	658	658			
Bibate	Bibate	5	423	1081			
	Nyarubungo	7	1024	2105	1399	1	1399
	Bubazi	6	781	2886			1736
	Kirama	3	395	3281	3135	2	3135
Bubaji	Mponyi	6	508	3789			1736
	Kivoga	9	1141	4930	4871	3	4871
Bugega	Bugega	7	796	5726			1736
	Buraza	12	2337	8063	6,607	4	6607
Buraza	Mutara	8	904	8967	8343	5	1736
	Ruvumu	8	119	9086			8343
	Buriza	11	449	9535			1736
Buriza	Kizama	6	571	10106	10079	6	10079
	Rugegene	5	587	10693			1736
Butemba	Butemba	5	808	11501			11815
	Nyakabuye	7	1071	12572	11815	7	1736
	Nyangungu	7	1191	13763	13551	8	13551
Butezi	Buteri	7	894	14657			1736
	Mpunju	6	498	15155			15287
Gicumbi	Nyakarenda	6	542	15697	15287	9	1736

	Nkunda	12	956	16653			17023
	Gisura	5	414	17067	17023	10	1736
Gisura	Ndaro	6	494	17561			18759
	Ngoringori	6	880	18441			1736
	Mujejuru	7	880	19321	18759	11	20495
Gitaramuka	Gitaramuka	12	1669	20990	20495	12	1736
	Rutobe	3	503	21493			22231
	Rabiro	3	658	22151			1736
Kabumbe	Kabumbe	3	483	22634	22231	13	23967
	Mahonda	7	1266	23900			1736
	Kirambi	7	1373	25273	23967	14	25703
Mahonda	Karunyinya	8	1029	26302	25703	15	1736
	Nyabasase	5	485	26787			27439
	Maza	4	483	27270			1736
	Nyarubimba	5	615	27885	27439	16	29175
Maza	Nyarugunza	6	680	28565			1736
	Cabumba	6	924	29489	29175	17	30911
	Nugano	7	1340	30829			1736
	Cunguza	6	1075	31904	30911	18	32647
Mugamo	Kirinzi	7	875	32779	32647	19	1736
	Jeroma	5	669	33448			34383
	Nyarunyoni	3	336	33784			1736
Musebeyi	Musebeyi	7	757	34541	34383	20	36119
	Buhogo	4	640	35181			1736
	Muyange	5	646	35827			37855
Muyange	Rubira	7	1115	36942	36119	21	1736
	Rufunzwe	7	663	37605			39591
	Rango	10	965	38570	37855	22	1736
Ndago	Gihete	8	880	39450			41327
	Gitaba	4	420	39870	39591	23	
	Ndava	5	423	40293			
Ndava	Mirende	4	450	40743			
	Rweza	3	284	41027			
	Manege	4	382	41409	41327	24	
Rweza	Nenge	2	258	41667			

TOTAL POPULATION IN BURAZA = 41, 667

Sampling Interval= 1736
Random Number= 1399

3. COMMUNE MAKEBUKO

Colline	Sbcolline	NK	Population	Cumulative Population

	Bitaka	13	1291	1291	998	1	998
	Kanyinya	11	711	2002			2231
Buga	Musenyi	12	930	2932			3229
	Bugumbasha	4	408	3340	3229	2	2231
Bugumbasha	Kivoga	13	1088	4428			5460
	Butobwe	8	872	5300			2231
Butobwe	Mwaka-Kirambi	4	429	**5729**	5460	3	7691
	Gasagara	8	927	6656			2231
	Kibere	7	592	7248			9922
Gasagara	Nyakivumvu	9	645	7893	7691	4	2231
	Gasasa	9	851	8744			12153
Gasasa	Gitega	6	651	9395			2231
	Gasenyi	8	807	10202	9922	5	14384
Gasenyi	Sumo	3	295	10497			2231
	Kayinajanja	12	1037	11534			16615
	Muhurika	9	930	12464	12153	6	2231
	Nyamirambo	8	867	13331			18846
Janja	Runanku	4	369	**13700**			2231
	Kabingo	4	266	13966			21077
Kagege	Kagege	5	324	14290			2231
	Gasenyi	5	611	14901	14384	7	23308
	Gikombe	9	1163	16064			2231
Karoba	Karoba	6	805	16869	16615	8	25539
	Kinyonsa	6	538	17407			2231
Kinyonza	Nyabwigungo	6	518	17925			27770
	Gaterama	6	597	18522			2231
	Kababaza	5	666	19188	18846	9	30001
	Kiyange	6	836	20024			2231
Kiyange	Nyarusange	8	1184	21208	21077	10	32232
	Buyegamo	12	1078	22286			2231
	Gitanga	4	296	22582			34463
Makebuko	Makebuko	5	329	22911			2231
	Muhororo	17	1067	23978	23308	11	36694
Muhororo	Nyamurenge	13	675	24653			2231
	Bungere	10	710	25363			38925
	Murago	11	667	26030	25539	12	2231
Murago	Gakonko	13	86	26116			41156
	Burarana	10	1087	27203			2231
Murenda	Murenda	7	733	27936	27770	13	43387
	Maramvya	6	474	28410			2231
Musave	Musave	11	856	29266			45618
	Muyange	6	510	29776			2231
Muyange	Ncana	3	379	30155	30001	14	47849

	Rutovu	13	1289	31444			2231
	Mitari	5	432	31876			50080
	Mwanzari	5	449	32325	32232	15	2231
	Nkingu	4	527	32852			52311
Mwamzari	Buja	6	811	33663			
	Mwaro-Mavuvu	5	526	34189			
Mwaro-Mavuvu	Rwego	6	609	34798	34463	16	
	Munyinya	4	337	35135			
	Mwaro-Ngundu	4	260	35395			
Mwaro-Ngundu	SITE	15	1371	36766	36694	17	
	Karambi	11	1078	37844			
Mwumba	Mwumba	8	630	38474			
	Kibenga	7	740	39214	38925	18	
Nyamagamdika	Nyamagandika	6	675	39889			
	Ntita	8	701	40590			
Ntita	Taba	4	449	41039			
	Rubimba	9	810	41849	41156	19	
	Rukinya	12	1450	43299			
Rusagara	Rusagara	4	439	43738	43387	20	
	Kanyami	12	1082	44820			
	Nyagasozi	8	846	45666	45618	21	
	Nyamishiha	8	558	46224			
Rutanganika	Rutanganyika	10	1035	47259			
	Gitaba	7	758	48017	47849	22	
	Kabukaro	6	338	48355			
Rwanda	Rwanda	9	697	49052			
	Kajenda	7	672	49724			
Rwesero	Kidasha	5	741	50465	50080	23	
	Buhunja	6	524	50989			
	Bumba	5	285	51274			
Rwezamenyo	Buye	3	262	51536			
	Gatwaro	9	818	52354	52311	24	
	Simba	7	691	53045			
Simba	Nyakara	6	494	53539			

TOTAL POPULATION IN MAKEBUKO = 53,539

Sampling Interval= 2231
Random Number= 998

4. COMMUNE ITABA

Colline	Sbcolline	NK	Population	Cumulative Population			
Buhanga	Buhanga	6	374	374			1366

	Rango	7	453	827			2195
	Buhinda	5	361	1188			3561
	Gakombe	5	382	1570	1366	1	2195
	Rugabo	9	563	2133			5756
	Runazi	5	348	2481			2195
	Ruvumu	5	320	2801			7951
	Karama	9	400	3201			2195
	Kibasi	5	263	3464			10146
Buhinda	Sakanyege	11	457	3921	3561	2	2195
	Gahonyi	7	409	4330			12341
	Karuguta	9	537	4867			2195
Butare	Nyagifu	6	393	5260			14536
	Gikombe	10	640	5900	5756	3	2195
Itaba	Ngarama	9	524	6424			16731
	Gihamagara	4	583	7007			2195
	Mujejuru	11	1523	8530	7951	4	18926
Gihamagara	Kabanga	7	589	9119			2195
	Bigera	5	428	9547			21121
	Gashingwe	5	361	9908			2195
	Kabago	2	216	10124			23316
	Kinovu	5	473	10597	10146	5	2195
	Kinyaruko	3	260	10857			25511
	Muhoza	5	490	11347			2195
	Murambi	7	689	12036			27706
	Musenga	10	1571	13607	12341	6	2195
	Nyakabuye	6	449	14056			29901
Gisikara	Rusange	5	307	14363			2195
	Kabago	8	630	14993	14536	7	32096
	Muhweza	8	487	15480			2195
	Mutumba	9	599	16079			34291
	Nyarusange	6	377	16456			2195
Kagoma	Shungwe	11	800	17256	16731	8	36486
	Kanyinya	6	379	17635			2195
	Gisoro	4	237	17872			38681
Kanyinya	Vyisure	4	220	18092			2195
	Cari	15	695	18787			40876
	Kigarama	16	760	19547	18926	9	2195
	Murore	6	298	19845			43071
	Ndaro	4	143	19988			2195
	Ngoma	21	929	20917			45266
Kanyonga	Ruvumu	25	1113	22030	21121	10	2195
	Karemba	4	604	22634			47461
Karemba	Gitaba	5	658	23292			2195

	Kivoga	9	971	24263	23316	11	49656
	Kibogoye	10	629	24892			2195
	Buzige	4	273	25165			51851
	Gashwabure	18	817	25982	25511	12	
	Gishiga	7	461	26443			
	Kanyinya	6	321	26764			
	Kidonzi	6	476	27240			
	Kiremba	6	326	27566	27706	13	
	Muzenga	11	700	28266			
	Pfunyangeso	11	679	28945			
	Rusasa	10	473	29418			
Kibogoye	Rwaza	6	329	29747			
	Kiniha	8	862	30609	29901	14	
Kirambi	Kivoga	4	278	30887			
	Munyegera	6	495	31382			
	Muramba	4	273	31655			
Kugitega	Nyabikinja	4	294	31949			
	Nyamurenge	8	512	32461	32096	15	
	Nyarubimba	9	516	32977			
Macu	Rusabe	9	505	33482			
	Gaterama	3	374	33856			
	Kaburanjwiri	3	504	34360	34291	16	
Mugomera	Nyarubungo	4	351	34711			
	Mutanga	7	735	35446			
	Kigera	4	505	35951			
Mutanga	Nzigi	7	613	36564	36486	17	
	Rango	5	399	36963			
Nkima	Rwimvura	4	245	37208			
	Ruhanza	4	267	37475			
	Buramba	5	444	37919			
	Mutumba	3	237	38156			
	Muyange	6	488	38644			
	Muyogoro	3	330	38974	38681	18	
	Mwenene	5	463	39437			
	Rukuku	7	578	40015			
	Rutyazo	5	426	40441			
Ruhanza	Nyabushishi	10	696	41137	40876	19	
	Rukobe	6	372	41509			
	Bwinjira	8	577	42086			
	Gihamba	7	664	42750			
	Nyarurambi	11	672	43422	43071	20	
Rukobe I	Sesero	15	833	44255			
Rukobe II	Buhoro	27	1275	45530	45266	21	

Gasunu	15	1185	46715		
Kigozi	13	1102	47817	47461	22
Rutegama I	9	554	48371		
Rutegama II	16	1044	49415		
Site Buhoro		645	50060	49656	23
Site Gihamagara		822	50882		
Site Gisikara		1790	52672	51851	24

TOTAL POPULATION IN ITABA = 52,672

Sampling Interval= 2195
Random Number= 1366

0-23 Months

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

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD LESS THAN 24

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 .....

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 _____ _____ AGE OF THE MOTHER (IN YEARS).....		NAME OF THE CHILD LESS THAN 24 MONTHS _____ _____ 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.	***If yes, then ask:*** 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 …….....		
SECTION B: MATERNAL AND NEWBORN CARE				
4.	During your pregnancy with (name of child) did you sleep under a mosquito net?	Yes……..…… …1 6 No……..…… 6 .0 6 Don't know…….....88 → No response…….....99 →		
5.	Did you sleep under the net all the time, most of the time, some of the time, or occasionally?	All of the time …….……..A Most of the time …….……B Some of the time …….……C Occasionally …….……..D		

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 ☐☐ Don't Know……..9		
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……..……....9 →		
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……...9		

#	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 → 12 Don't Know……...……. ...9 → 12		
11.	Before the pregnancy with (Name), how many times did you receive a tetanus injection? NOTE CHANGE IN QUESTION[xii]	One…….……. 1 Two……..…… 2 Three Or More……..……3 Don't Know……..9		

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/ Neighbor ……..…...F 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 ☐☐ Days……..1 ☐☐ Weeks…….2 ☐☐ 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		

SECTION C: ILLNESS RECOGNITION				
16.	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? ***RECORD ALL MENTIONED.***	Don't Know ..... Looks Unwell Or Not Playing Normally…….B Not Eating Or Drinking ..... Lethargic Or Difficult To Wake ..... High Fever ..... Fast Or Difficult Breathing ..... Vomits Everything ..... Convulsions ..... Gets worse despite home care……..I Looks dehydrated (dry mouth or no tears)...J Other _____ (Specify)		

17.	Did (NAME) experience any of the following in the past two weeks? CIRCLE ALL THAT APPLY Diarrhea? Cough? Difficult breathing Fast breathing or short, quick breaths? Fever? Malaria? Convulsions? ***IF YES GO TO Q18 AND COMPLETE THE QUESTIONNAIRE, THEN AFTER GO TO APPROPRIATE ILLNESS QUESTIONNAIRE***	Diarrhea..... Cough..... Difficult Breathing ..... Fast Breathing/Short, Quick Breaths..... Fever ..... Malaria..... Convulsions ..... None……..…… ..H Other…… …I		

#	Questions	Responses	Skip	Answer
SECTION D: WATER AND SANITATION				
18.	Do you treat your water in any way to make it safer for drinking?	Yes..... No	→ 20	
19.	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/Sedimentation ... Strain It Through Cloth..... Boil ..... Add Bleach/Chlorine ..... Water Filter (Ceramic, Sand, Composite) ..... Solar Disinfection..... Don't Know ..... Other _____ (Specify)		
20.	When do you wash your hands? *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)	→ 23	
21.	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 ..... Inside/Near Kitchen/Cooking Place ..... Elsewhere In Yard ..... Outside Yard..... No Specific Place..... No Permission To See.....		

22.	OBSERVATION ONLY: Is there soap or detergent or locally used cleansing agent? ***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.***	Soap..... Detergent ..... Ash..... Mud/Sand ..... None ..... Other _____ (Specify)		
23.	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
24	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

25	Does your household have any mosquito nets that can be used while sleeping?	Yes……1 No……..…0 →	**30**	
26	Where did you get the bed net you are using?	Health Center……A Immunization Campain……B Shop/market……..C. Don't know……D Other_____E (**Specify)**		
26.F	When did you get the bed net you are using?	Within 0-3 Years……A More than three years……B		
27	Was the bednet ever soaked or dipped in a liquid to repel mosquitoes or bugs?	Yes.....1 No .....2 → Don't Know .....**8** →	**29** **29**	
28	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 I YEAR AGO, PROBE FOR THE EXACT NUMBER OF MONTHS.**	Months ..... ☐☐ More Than 2 Years Ago……1. Don't Know 8		

29	Who slept under a bednet last night? **RECORD ALL MENTIONED.** **IF ANYONE OTHER THAN THE CHILD IS MENTIONED, CIRCLE "OTHER."**	No One…….…… A Child (Name)..... B Myself ..... C Husband/Partner..... D Other_____ (Specify)		

#	Questions	Responses	Skip	Answer
SECTION F: ANTHROPOMETRICS				
30.	May I weigh (name of child)?	Yes **……..A** → **__ __ . __ Kilograms** No……B → **Go to END**		
31.	**Copy Child age in months**			
32.	**Copy Child Gender**			
33.	**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

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**
Team leader review**:		
Keyed by:		

***Review for completion – all answers answered, skip patterns followed, etc.*

RESPONDENT IDENTIFICATION

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 .....

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 _____ AGE OF THE MOTHER (IN YEARS).....		NAME OF THE CHILD LESS THAN 24 MONTHS _____ 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.				
	Have you ever attended school?	Yes…… 1 …….....…… 0 → 3 … 88 → 3 No…… 99→ …….....…… Don't know…… ……..... No response…… ……..... ……		
	If yes, then ask: What is the highest grade or level of school you have completed?	No 1 School…… 2 ……..…….. 3 Primary…… 4 …….……..… 5 Secondary…… ……..…… Past Secondary ……..…… … Other…… ……..		

	How many people live in your household?	Number…… ## …….....…… 88 Don't know…… 99 ……..... No response …… ….....			
#	**Questions**	**Responses**	**Skip**	**Answer**	
SECTION B: BREASTFEEDING					
37	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			
38	Did you give anything to (name of child) before the first breastfeeding?	Yes……. ……..A No…… …….B Don't know……..C			
39	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: YES NO DK			
	A. Breast milk?	A…… ……1 0 8			
	B. Plain water?	B……..……...1 0 8			
	C. Cow Milk	C……. ……...1 0 8			
	D. Banana Juce	D……...1 0 8			

	E. Commercially produced infant formula?	E……..……1 0 8		
	F. Any fortified, commercially available infant and young child food (e.g. Cerelac)?	F……1 0 8		
	G. Any (other) porridge or gruel?	G……1 0 8		

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

Survey Questionnaire

ALL QUESTIONS ARE TO BE ADDRESSED TO MOTHERS WITH A CHILD 6-23 MONTHS OF AGE

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 .....

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 _____ AGE OF THE MOTHER (IN YEARS).....	NAME OF THE CHILD LESS THAN 24 MONTHS _____ 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.					
40.	Have you ever attended school?	Yes…… No…….. Don't know…….. No response…	1 0 → 88 → 99 →	3 3 3	
41.	***If yes, then ask:*** What is the highest grade or level of school you have completed?	No School…….. Primary……..… Secondary…….… Past Secondary … Other……..	1 2 3 4 5		
42. .	How many people live in your household?	Number……. Don't know…… No response	…. …. 88 99		

#	Questions	Responses	Skip	Answer
SECTION B: NUTRITION				
43.	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 8		
	I. Plain water?	B……..……...1 0 8		
	J. Cow Milk	C……. ……...1 0 8		
	K. Banana Juce	D……. ……...1 0 8		
	L. Commercially produced infant formula?	E……..1 0 8		
	M. Any fortified, commercially available infant and young child food" [e.g. Cerelac]?	F……..……1 0 8		
	N. Any (other) porridge or gruel?	G……1 0 8		

44	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. Did (NAME) drink/eat:	YES NO DK				
	A. Milk such as tinned, powdered, or fresh animal (cow; goat…) milk?	A.....……1	0	8		
	B. Tea or coffee?	B …..……... 1	0	8		
	C. Any other liquids?	C……..1	0	8		
	D. Bread, rice, noodles, or other foods made from grains?	D……..1	0	8		
	E. Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	E…….....1	0	8		
	F. White potatoes, white yams, manioc, cassava, or any other foods made from roots?	F……...1	0	8		
	G. Any dark green leafy vegetables?	G…….....1	0	8		
	H. Ripe mangoes, papayas or (INSERT ANY OTHER LOCALLY AVAILABLE VITAMIN A-RICH FRUITS)?	H…….....1	0	8		
	I. Any other fruits or vegetables?	I……1	0	8		
	J. Liver, kidney, heart or other organ meats?	J……1	0	8		
	K. Any meat, such as beef, pork, lamb, goat, chicken, or duck?	K……...1	0	8		
	L. Eggs?	L……1	0	8		
	M. Fresh or dried fish or shellfish?	M……...1	0	8		
	N. Any foods made from beans, peas, lentils, or nuts?	N……1	0	8		
	O. Cheese, yogurt, or other milk products?	O……....1	0	8		
	P. Any oil, fats, or butter, or foods made with any of these?	P……....1	0	8		

	Q. Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits?	Q……1	0	8		
	R. Any other solid or semi-solid food?	R……1	0	8		
	1. 2. OPTIONAL FOOD GROUP: ADD IF COMMONLY GIVEN TO INFANTS/CHILDREN 3. S. Grubs, snails, insects, other small protein food?	S……..1	0	8		
	T. Foods made with red palm oil, palm nut, palm nut pulp sauce	T…….....1	0	8		

SECTION C: VITAMIN A SUPPLEMENTATION

45	Has (NAME) ever received a vitamin A dose (like this/any of these)? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS	Yes .....1 No .....0 → **Go To End** Don't Know .....8 → **Go to end**				
46	Did (NAME) receive a vitamin A dose within the last 6 months?	Yes .....1 No .....0 Don't Know 8				
47	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 lost …….B → **Go to end** No, never had a card……C → **Go to end** Don't know ……..…D→ **Go to end**				
48	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.					

	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 _____

12-23 Months

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 _____ Age Of The Mother (In Years)		Name Of The Child Less Than 24 Months _____ 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 →		
		No…… ……..…….	88 →	3	
		Don't know…… …….....	99 →	3	
		No response…… …….....		3	
2.	***If yes, then ask:*** What is the highest grade or level of school you have completed?	No School…… ..……..	1		
		Primary……. ……..….	2 3 4		
		Secondary…… ……..……	5		
		Past Secondary ……			
		Other…… ……..			
3.	How many people live in your household?	Number…… ……..…….	##		
		Don't know…… …….....	88 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 lost …….B → No, never had a card……..C → Don't know ……..…D →	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*	**Date of Immunization** DAY | MONTH | YEAR **BCG** **POLIO 0 (POLIO GIVEN AT BIRTH OR BEFORE 6 WEEKS)** **POLIO 1** **POLIO 2** **POLIO 3** **DTP 1** **DTP 2** **DTP 3** **HepB 1** **HepB 2** **HepB 3** **Measles**		
6.	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations given during immunization campaigns?	Yes .....1 No.....0 Don't Know 8		
7.	Did (NAME) ever receive any vaccinations, including vaccinations given during immunization campaigns?	Yes .....1 No.....0 Don't Know 8		
	Please tell me if (NAME) received any of the following vaccinations:			
8.	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 8		

9.	Polio vaccine, that is, drops like these, in the mouth? Show the example of polio drops	Yes ..... 1 No ..... 0 Don't Know 8		

#	Questions	Responses	Skip	Answer
10	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 8		
11	How many times was the polio vaccine received?	Number Of Times ..... ☐		
12	DTP vaccination, that is, an injection given in the thigh, sometimes at the same time as polio drops?	Yes ..... 1 No ..... 0 Don't Know 8	14 →	
13	How many times?	Number Of Times ..... ☐ Don't Know 8		
14	HepB vaccine?	Yes ..... 1 No ..... 0 Don't Know 8	16 →	
15	How many times?	Number Of Times ..... ☐ Don't Know 8		
16	Did (NAME) ever receive an injection in the arm to prevent Measles?	Yes ..... 1 No ..... 2 Don't Know 8		

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

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)

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 .....

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 _____ AGE OF THE MOTHER (IN YEARS).....		NAME OF THE CHILD LESS THAN 24 MONTHS _____ 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……………………………………………… No……………………………………………… Don't know………………………………… No response……………………………	1 0 → 88 → 99 →	3 3 3	
2.	***If yes, then ask:*** What is the highest grade or level of school you have completed?	No School……………………………… Primary………………………………… Secondary……………………………… Past Secondary …………………………… Other………………………………………	1 2 3 4 5		
3.	How many people live in your household?	Number………………………………… Don't know…………………………… No response …………………………………….	## 88 99		

#	Questions	Responses	Skip	Answer
SECTION B: FEVER (SUSPECTED MALARIA)				
	Did you seek advice or treatment for (NAME'S) fever?	Yes………………………………………………1 No………………2 ⟶ **Go to end**		

	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)		
	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 Know……..8		
	Was (NAME) treated with any medicine(s)?	Yes.....1 No……2 ⟶ **Go to end** Don't Know……8 ⟶ **Go to end**		

	Which medicines were given to (NAME) for his/her fever?[1] CIRCLE ALL MEDICINES THAT WERE GIVEN. 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. FOR EACH ANTI-MALARIAL MEDICINE ASK: **How long after the fever started did (NAME) start taking the medicine?** CIRCLE THE APPROPRIATE CODE. CODES: SAME DAY = 0 NEXT DAY AFTER THE FEVER = 1 TWO DAYS AFTER THE FEVER = 2 THREE OR MORE DAYS AFTER THE FEVER = 3	**ANTI-MALARIAL DRUGS** A. Amodiaquine + Artesunate….0 1 2 3 8 B. Quinine……..0 1 2 3 8 **Other Drugs** C. Paracetamol …….0 1 2 3 8 D. Unknown Drug ……0 1 2 3 8 E. Other_____ 0 1 2 3 8 (Specify)		

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 _____

Diarrhea

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)

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 .....

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 _____ Age Of The Mother (In Years)		Name Of The Child LESS THAN 24 MONTHS _____ 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 →		
		No…… …..…….	88 →	3	
		Don't know…… …….....	99 →	3	
		No response…… …….....		3	
2.	***If yes, then ask:*** What is the highest grade or level of school you have completed?	No School…… ..……..	1 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.	**If the child is exclusively breastfeed (only taking breastmilk), ask only this question and then skip to end.** When (name of child) was sick, was s/he offered more breastmilk than usual, about the same amount, or less than usual?	Less than usual ……A → **Go to end** Same amount ……B → **Go to end** More than usual ……C → **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 water ……..B 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

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 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 _____ AGE OF THE MOTHER (IN YEARS).....		NAME OF THE CHILD LESS THAN 24 MONTHS _____ 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………………………………………………. No…………………………………………………. Don't know………………………………………. No response…………………………………....	1 0 → 88 → 99 →	3 3 3	
2.	***If yes, then ask:*** What is the highest grade or level of school you have completed?	No School………………………………….. Primary………………………………..… Secondary………………………………… Past Secondary …………………………… Other………………………………………..	1 2 3 4 5		
3.	How many people live in your household?	Number……………………………………. Don't know………………………………………. No response …………………………………….	## 88 99		

#	Questions	Responses	Skip	Answer
SECTION B: PNEUMONIA TREATMENT				
	41. When (name of child) had an illness with a cough, did s/he have trouble breathing or breathe faster than usual?	Yes……A No **……B → Go to end** Don't know **……C→ Go to end**		
	Did you seek advice or treatment for the cough/fast breathing?	Yes……..A No……B **→ Go to end**		
	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 _____

APPENDIX C. MIDTERM KPC SURVEY QUESTIONNAIRE (KIRUNDI)

0-23 Months

Midterm KPC Survey Questionnaire- LQAS Parallel Sampling
GUSUZUMA KO URUTONDE RW'IBIBAZO RWOSE RWUJUJWE

INYUMA Y'UKUBAZA BURI MUVYEYI SUZUMA KO BURI KIBAZO COSE CISHUWE	**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….

IBIBAZO VYA RUSANSUMA

IBIBAZO VYOSE BITEGEREZWA KWISHURWA N'ABAVYEYI BAFISE UMWANA ARI MUSI Y'AMEZI 24

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 _____ Imyaka y'umuvyeyi	Izina ry'umwana ari musi y'amezi 24 _____ 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				
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.				
49.	Woba warigeze uja kw'ishure?	Ego……..……	1	
		Oya……..……	0 → 3	
		Sinzi…….....	88 → 3	
		Ntanyishu……...	99 → 3	
50.	***NIMBA ARI EGO, BAZA:*** Wagarukiye muwakangahe?	Ntashure……..……	1	
		Amashuri matomato……..…	2	
		Amashuri yisumbuye……	3	
		Kaminuza ……	4	
		Ayandi……	5	
		(DONDAGURA)		
51.	Murugo rwawe haba abantu bangahe?	Igitigiri…….....	….. …	
		Sinzi…….....	88	
		Ntanyishu …….....	99	

IKIGABANE CA KABIRI: UKWITWARARIKA UWUVUTSE N'UMUVYEYI				
52.	Mugihe c'imbanyi y'uwo mwana (***vuga izina ry'umwana***) warigeze uryama mumusegetera ?	Ego……..……1 Oya……..……0 Sinzi……..…..88 Ntanyishu…….....99	→ 6 6 → 6 →	
53.	Mugihe c'imbanyi y'uwo mwana ***(vuga izina)*** waryama mu musegetera igihe cose, kenshi, rimwe rimwe canke gake?	Igihe cose …..……..……..A Kenshi ……B Rimwe rimwe …..……C Gake…….…… ……D		
54.	Mugihe c'imbanyi y'uwo mwana (***vuga izina***), woba waragiye gusuzumisha imbanyi imbere yuko uvyara?	Ego……..…… …..1 Oya……..…… …..0 Sinzi……..….. ....88 Ntanyishu……..... 99	→ → 10 → 10 10	
55.	Mugihe c'imbanyi y'uwo mwana ***(vuga izina)***, watanguye kwipimisha imbanyi ifise amezi angahe?	Amezi…….. ☐ Sinzi…….. 9		

#	Ibibazo	Inyishu	Simba	Inyishu
56.	Mugihe c'imbanyi yuwo mwana ***(vuga izina ry'umwana)*** warigeze uhabwa urucanco batera kukuboko rukingira umwana tetanusi iseruka mukudadarara kw'umwana yavutse?	Ego…… …..…1 Oya……..… …....0 Sinzi……...…….. ……..9	➔ 10 ➔ 10	
57.	Igihe wari ufise imbanyi yuwo mwana (**muvuge izina)** waronse urwo rucanco rwa tetanusi kangahe?	Rimwe……. …..…1 Kabiri……..…… ……2 Gatatu canke kenshi……..……3 Sinzi……..…… …...9		
58.	Mbega warigeze uterwa urucanco rukingira Tetanusi igihe icarico cose imbere yuko wibungenga, ushizemwo kuzindi mbanyi canke hagati y'imbanyi?	Ego…….. ……1 Oya……..…… …...0 Sinzi……...……... 9	➔ 12 ➔ 12	

59.	Imbere yimbanyi yuwo mwana ***(Izina)*** mbega wazitewe kangahe?	Rimwe…… …….1 Kabiri……..…… …..…2 Gatatu canke kenshi……..…3 Sinzi…… ……..9		
#	**Ibibazo**	**Inyishu**	**Simba**	**Inyishu**
60.	Mugihe co kwibaruka uwo mwana (vuga izina ryuwo mwana) Ninde yakwakiriye? ***BAZA NEZA UKORESHEJE IBIBAZO BIDASHOKA BITANGA INYISHU, USHIRE AKANZINGI KUBAVUZWE BOSE.*** ***MUGIHE UWISHUYE AVUZE KO ATANUMWE YAMWAKIRIYE, BAZA NEZA UKORESHEJE IBIBAZO BIDASHOKA BITANGA INYISHU KUGIRA NGO UMENYE KO HOBA HARI UMUNTU AKUZE IGIHE COKUVYARA***	Dogiteri ……..A Umuforoma/umuforomakazi..... .....B Umwakirizi wo kwamuganga …….C Umwakirizi wo mu kirundi ….....…….D Abaremeshakiyago …….....……E Incuti/Umugenzi/Umubanyi …….....…....F Ntanumwe (umuvyeyi yari wenyene) ..... G		

61.	Mbega uhejeje kwibaruka hoba hariho umuntu yasuzumye amagara yawe nay'umwana ***(muvuge izina)***?	Ego…….. ……..1 Oya……..…… …....0	16 →	
62.	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 ☐☐ Iminsi..... 1 ☐☐ Amayinga .....2 ☐☐ Sinzi…….....……99		

63.	Nibande basuzumye amagara y'uwo mwana (muvuge izina) muri ico gihe? ***BAZA NEZA UKORESHEJE IBIBAZO BIDASHOKA BITANGA INYISHU, WANDIKE INYISHU KUBAVUZWE BOSE***	Dogiteri ……..A Umuforoma/umuforomakazi .....B Umwakirizi wo kwamuganga……..C Umwakirizi wo mu kirundi .....…….D Abaremeshakiyago .....…….E Incuti/Umugenzi/Umubanyi ...…….…....F Ntanumwe (umuvyeyi yari wenyene)…. G		

#	Ibibazo	Inyishu	Simba	Inyishu
IKIGABANE CA GATATU: KUMENYA INDWARA				
64.	Hariho ibihe umwana agwara maze agakenera kuvurwa. Ibimenyetso bikwereka ko umwana wawe akeneye kuvurwa? ***ANDIKA IBIVUZWE VYOSE.***	Sinzi…….....…….A Igihe asa nkuwugwaye kandi adashobora gukina neza.....…….....B Igihe atariko ararya, anywa, canke yonka……..C Arushe canke bigoye kwavyuka ..……D Afise ubushuhe bwinshi .....….E Ahemagurika canke vyanka ko ahema .....F Adahwa igihe cose..... G Igihe umwana adadaraye..... H Aguma aremba naho yitwararitswe cane i muhira ……,….I Asa nkuwatakaje amazi muri we (umunwa wumye canke atamosozi)……J IBINDI ..... K **(DONDAGURA)**		

65.	Mbega uyo mwana ***(Izina)*** yoba yaragize ibimenyetso (indwara) ngira ndakubwire mumayinga abiri aheze? ***SHIRA AKAZINGI KUNYISHU IBEREYE*** Gucibwamwo? Gukorora? Guhema bigorana Guhemagurika? Ubushuhe? Malariya? Kudadarara? ***INYISHU ARI EGO JA KUKIBAZO CA 18 UHEZE IBIBAZO HANYUMA UCE UJA KUBWOKO BWINDWARA BUJANYE***	Gucibwamwo ..... A Gukorora ..... B Guhema bigorana ..... C Guhemagurika..... D Ubushuhe ..... E Malaria.....F Kudadarara ..... G Nta na kimwe……..H Ibindi ……I		

#	Ibibazo	Inyishu	Simba	Inyishu
	IKIGABANE CA KANE:AMAZI N'ISUKU			
66	Hariho isuku ugirira amazi yo kunywa kugirango abe meza?	Ego.....1 Oya.....0⟶	20	
67	Nimba inyishu ari ego, mbega none ukorera ibiki amazi kugira ngo abe meza ashobore kunyobwa? ***SHIRA UTUZINGI KU NYISHU ZOSE ZIVUZWE,NIMBA HAKORESHWA UBURYO BURENZE BUMWE,NKAKARORERO KUYAMIMINA UKORESHEJE AGAHUZU NUMUTI USUKURA AMAZI***	Kurindira amazi atonganuke/ yireke …….A Kuyayungurura ukoresheje agahuzu/ kuyamimina B Amazi yabize/ guteka amazi .....C Gushiramwo umuti (Sur'Eau)/chlore.....D Akayungiro k'amazi (umusenyi…) .....E Kwica imigera mumazi ukoresheje imishwarara yizuba.....F Sinzi .....G Ibindi_____ H **(DONDAGURA)**		
68	Niryari ukaraba iminwe yawe? ***NUBAZE UDATANGA INYISHU. CA AKAZINGI MUSI YIBIDONDAGUWE.***	Ntanarimwe……..…A ⟶ Ngomba ntangure guteka ……...B Ngomba ngaburire umwana……..C Mpejeje kwituma …….D Mpejeje kwoza umwana yitumye……..…E Ibindi_____ F	23	

69	Urashobora kunyereka aho wama ukarabira nico ukarabiramwo? ***NUSABE AHAKWEREKE MAZE UHAGENZURE.***	Hafi yakazu ka sugumwe .....1 Hafi yigikoni ……2 Kumbuga.....3 Kure yo kumbuga.....4 Ntanahamwe hama hateguwe .....5 → 23 Ntaruhusha ruriho rwokuhabona.....8 → 23		
70	**<u>UMWIHWEZO GUSA</u>:** Hoba hariho isabuni, canke ikintu cose gikoreshwa mu kugira isuku? ***IKI GIKORESHO GITEGEREZWA KUZANWA UBWONYENE NA NYENE KUBAZWA CANKE HEREKANWE AHO KIRI. KITAZANYWE UBWO NYENE CANKE KIZANYWE MUNYUMA SHIRA AKAZINGI KURI "NTAKOMFISE."***	Isabuni.....1 Omo .....2 Umunyota.....3 Urwondo/umusenyi .....4 Ntakihari .....5 Ibindi _____ 6 (**DONDAGURA**)		
71	Akazu kasugumwe mufise kameze gute? Ndashobora kukabona?	Ntakodufise ……..….A Ntigafundikiye ……B Karafundikiye ……..……..C Nakikizungu ……D Ntaruhusha ufise rwokukaraba ……..E		

72	Igihe umwana ***(vuga izina ry'umwana)*** aheruka kwituma washize hehe umwanda wiwe? ***BAZA NEZA KUGIRANGO UMENYE AHO BAWUSHIZE.***	Twawutaye mwiwese…….A Twawutaye aho duta umwavu ……B <u>Twawushize iruhande y'inzu</u>: Narawimbiye ndawufurira?.....C1 Canke sinawimbiye ……..C2 <u>Twawushize kure y'inzu</u>: Narawimbiye ndawufurira?.....D1 Canke sinawimbiye …… …….D2 Sinzi……..E Ahandi _____F (**DONDAGURA)**		
IKIGABANE CAGATANU: KWIRINDA MALARIYA				
73	Mbega urugo rwawe rwoba rutunze imisegetera ishobora gukoreshwa mugihe abantu baryamye?	Ego……....1 Oya……0 ⟶	30	
74	Uwo musegera uriko urakoresha wawuronkeye hehe?	Kwa mugagnga……A Isekeza……B Utuguriro/Isoko……C Sinzi……D Ahandi _____.E **(DONDAGURA)**		
26.B	Uwo musegera uriko urakoresha wawuronse ryari?	Haheze imyaka 0 kugeza ku 3……A Imyaka itatu irenga……B		
75	Mbega uwo musegetera woba warabombetswe mu muti wirukana imibu n'ibihere**?**	Ego .....1 Oya.....2 ⟶ Sinzi.....8 ⟶	29 29	

76	Mbega uwo musegetera umaze igihe kingana gute utabombetswe mu muti wirukana imibu n'ibihere? ***NIMBA ARI MUSI Y'UKWEZI KUMWE GUHEZE, ANDIKA AMEZI 00. NIMBA ARI MUSI Y'AMEZI 2 AHEZE, ANDIKA IGITIGIRI C'UKWEZI. NIMBA ARI AMEZI 12 AHEZE CANKE UMWAKA UHEZE, BAZA IBIBAZO BIDATANGA INYISHU KUGIRANGO UMENYE IGITIGIRI NYAKURI C'AMEZI AHEZE.***	Amezi ..... ☐☐ Imyaka irenze ibiri……....1 Sinzi..... …8		
77	Nibande baryamye mumusegetera n'ijoro**?** ***NIMBA HARI UWUNDI MUNTU AVUZWE ATARI UMWANA, SHIRA AKAZINGI KU "ABANDI".***	Ntanumwe…… A Umwana (izina)……. ....…B Jewe nyene ..... .C Umugabo/uwotwubakanye…….D Abandi_____E **(DONDAGURA)**		
IKIGABANE C'INDWI: GUPIMA UBUREMERE				

78	Ndashobora gupima uburemere bwuwo mwana (Muvuge izina)?	Ego**…..A→ __ __. __ Kilos** Oya…….B → **Heza ibibazo**		
79	***Andika imyaka y'umwana mumezi***	**…… ……**		
80	***Andika igitsina c'umwana***	Umuhungu……..1 Umukobwa……..2		
81	***Imero nkomoka ngaburo y'umwana HUZUZWA N'UMUGENZUZI GUSA***	Imero nziza **(> - 2SD)** ……...A Imero mbi Atari cane **(-2 ≤SD≥-3)** ……B Imero mbi cane **(<-3SD)** ……C		

Murakoze! Turahejeje ibibazo. Turabashimiye ko mwafashe umwanya 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 CYA 17 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 _____

0-5 Months

IBIBAZO VYOSE BITEGEREZWA 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 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 YEMEYE KWISHURA KUBIBAZO.....
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 _____ Imyaka y'umuvyeyi	Izina ry'umwana ari musi y'amezi 24 _____ 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					
<u>INGINGO NGENDERWAKO</u>: 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.					
	Woba warigeze uja kw'ishure?	Ego……..…… …… Oya……..…… …… Sinzi……..... ..... Ntanyishu……...	1 0 88 99	→ 3 → 3 → 3	
2.	***NIMBA ARI EGO, BAZA:*** Wagarukiye muwakangahe?	Ntashure……..…… …… Amashuri matomato……..……..… Amashuri yisumbuye……..……	1 2 3 4		

		Kaminuza 5 ……..…… Ayandi…… …….. **(DONDAGURA)**		
3.	Murugo rwawe haba abantu bangahe?	Igitigiri……..... ……. …. Sinzi……..... 88 Ntanyishu 99 ……..... IKIGABANE CA KABIRI: KWONSA		
4.	Uhejeje kwibaruka watanguye kwonsa umwana wawe ***(muvuge izina)*** ryari?	Ubwo nyene mw'isaha yambere nibarutse…... A Isaha imwe iheze avutse niho yonka ……..... B Amasaha munani aheze avutse……..… C Sinzi ……..……..…..D		
5.	Harico wahaye umwana (***Vuga izina ryiwe)*** imbere yuko utangura kumwonsa?	Ego……..…..A Oya…….B Sinzi ……..C		

#	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 ……8		
	B. Amazi?	B……1 …… 0 ……8		
	C. Amata y'inka?	C……1 …… 0……8		
	D. Umutobe?	D……1 …… 0 ……..….8		
	E. Amata yahinguwe mugabo agurishwa?	E……1 ……...0 ……..…8		
	F. Ibifungugwa bvahinguwe bigategurirwa inzoya? (cerelac..)	F……1 …… 0 ……..….8		
	G. Umusururu uwariwo wose?	G……1……...0……8		

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 _____

6-23 Months

IBIBAZO VYOSE BITEGEREZWA 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 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 YEMEYE 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 _____ Imyaka y'umuvyeyi	Izina ry'umwana ari musi y'amezi 24 _____ 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				
<u>INGINGO NGENDERWAKO</u>: 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.				
	Woba warigeze uja kw'ishure?	Ego……..……	1	
		Oya……..……	3	
		Sinzi…….....	3	
		Ntanyishu…….....	3	
	NIMBA ARI EGO, BAZA: Wagarukiye muwakangahe?	Ntashure……..……..	1	
		Amashuri matomato…….……..…	2	
		Amashuri yisumbuye…….……	3	

		Kaminuza ……..…… 4 Ayandi……. . 5 **(DONDAGURA)**		
	Murugo rwawe haba abantu bangahe?	Igitigiri…….....……. ….. Sinzi……..... 88 Ntanyishu ……..... 99		
IKIGABANE CA 2: INGABURO				
	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 E utanguriye kumaberebere.***	Mbega uyo mwana (vuga izina ryuyo mwana) yaranyoye canke yarafunguye ibikurikira: EGO OYA SINZI		
	A.Amaberebere?	A.……1……..0……8		
	B. Amazi?	B.……1……..0……8		
	C. Amata y'inka?	C.……1……..0……8		
	D. Umutobe?	D.……1……..0……8		
	E. Amata yahinguwe mugabo agurishwa?	E.……1……..0……8		

	F. Ibindi bifungugwa byahinguwe bigategurirwa inzoya?	F……1……..0……..8		
	G. Umusururu uwariwo wose?	G……1……..0……..8		

#	Ibibazo	Inyishu	Simba	Inyishu
	Ubu nagomba ndakubaze ivyerekeye (ibindi) binyobwa n'imfungurwa uyo mwana ***(muvuge izina)*** yoba yarafashe ejo kumurango canke mw'ijoro. Nkeneye kumenya ko uwo mwana yaronse ico kintu naho vyoba vyari bivanze n'ibindi vyokurya. ***SOMERA UMUVYEYI URUTONDE RW'IBINYOBWA UCE USHIRA AKAMENYETSO MU KIBANZA C'INYISHU ITANZWE.*** Mbega ***(vuga izina ryuyo mwana)*** yaranyoye canke yarafunguye ibyo ngira nkubwire?			
	Umurwi	**Ego Oya Sinzi**		
	Umurwi wa 1: Ibikomoka ku mata (Dairy)			
	A. Amata yateguwe,akorwa kugira agurigwe umwana?	A ……1……..0……8		
	B. Amata ari mumagopo, y'ifu (Nido) canke amata y'inka?	B ……1……..0……8		
	C. Imfyufyu, Ikivuguto, amata y'inka canke ibiva mu mata yinka bindi?	C ……1……..0……8		
	Umurwi wa 2: Ibinyantete (Grain)			
	D. Imfungurwa zose zateguriwe , zigahingurirwa inzoya n'abana (akarorero: Serelake)?	D ……1……..0……8		
	E. Umusururu (ubuyi)?	E ……1……..0……8		
	F. Umukate, umuceri, ibigori canke izindi mfungurwa zakozwe mu ntete (uburo, amasaka, ingano)?	F ……1……..0……8		
	G. Ibiraya (vyera imbere), Ibire (ibisunzu) canke amateke (vyera imbere), inumpu, umwumbati canke ibindi biterwa twamura imizi yavyo?	G ……1……..0……8		
	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?	H ……1……..0……8		
	I. Imbogaboga zibabi zisa n'urwatsi rutoto (irengarenga, isombe, umusoma, epinari, isogo, inyabutongo, umukubi)?	I……1……..0……8		

	J. Imyembe ihiye, I papayi canke itomate?	J……1……..0……8		
	K. Ibifungurwa vyarunzwe amamesa?	K……1……..0……8		
#	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……8		
	Umurwi wa 5: Amagi (Eggs)			
	M. Amagi?	M……1……..0……8		
	Umurwi wa 6: Ubwoko butandukanye bw'inyama n'amafi (Meat, Poultry, Fish)			
	N. Amahaha, igitigu, umutima canke inyama zo munda?	N……1……..0……8		
	O. Ikiremve	O……1……..0……8		
	P. Inyama yose nk'inka, ingurube, impene, intama, inkoko canke imbata, imbeba, ifuku, inkwavu, inuma, inkware?	P……1……..0……8		
	R. Ifi zumye canke mbisi?	R……1……..0……8		
	S. Inswa, isenene, ubunyabobo, ibikenya, ibinyagu?	S……1……..0……8		
	Umurwi wa 7: Imboga n'ibindi byera imikerera (Legumes/Nuts)			
	T. Indya zoze zivuye mu biharage, ubwishaza, ivyema, inkore n'izindi ntete, I soja, intengwa?	T……1……..0……8		
	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……8		
	Umurwi wa 9: Izindi mfungunwa (Other foods)			
	V. Icayi canke ikawa?	V……1……..0……8		
	W. Ibindi binyobwa vyose (nk'amake)?_____			
	Y. Ibifungurwa vyose bifise isukari, imbombo, ibisuguti, ibitumbura, ifanta, imisigati, ubuki?	K……1……..0……8		
	Z. Izindi mfungurwa zitavuzwe? _____			

#	Ibibazo	Inyishu	Simba	Inyishu
IKIGABANE CA 3: KWONGERA VITAMINE A				
	Mbega uyu mwana ***(vuga izina ryiwe)*** yoba yararonse vitamine A (imeze nk'iyi ngira ndakwereke)? ***MWEREKE AKANINI KA VITAMINE A***	Ego……..1 Oya ……0 → **HEZA** Sinzi ……..8 → **HEZA**		
	Mbega uyu mwana ***(vuga izina ryiwe)*** yoba yararonse vitamine A muraya mezi 6 aheze?	Ego ..... 1 Oya ..... 0 Sinzi 8		
	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?	Ego, uwubaza narabe iyo karata...A Ego, mugabo ikarata yaratakaye, narayibuze .....B **HEZA** Oya, sinigeze ndonka ikarata…..C → **HEZA** Sinzi ……D → **HEZA**		

	Andika inkuru zijanye na Vitamine A nkuko vyanditswe mwikarata canke agakaye.Copy only information related to Vitamine A. Nimba inkuru za Vitamine A zerekeye umwana zitanditswe mugakaye canke mwikarata, andika 99/99/9999.										

	Umusi		Ukwezi		Umwaka			
Vitamin A								
Vitamin A								
Vitamin A								

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 _____

12-23 Months

IBIBAZO VYOSE BITEGEREZWA 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 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 _____ _____ Imyaka y'umuvyeyi	Izina ry'umwana ari musi y'amezi 24 _____ _____ 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				
<u>INGINGO NGENDERWAKO</u>: 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.				
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	
		Amashuri yisumbuye…….……	3	
		Kaminuza …….……	4	
			5	

		Ayandi…… …….. **(DONDAGURA)**		
3.	Murugo rwawe haba abantu bangahe?	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, narayibuze .....B Oya, sinigeze ndonka ikarata……....C → Sinzi ……..D →	7 7 7	
5.	Andika amatariki yo gucandagishirizwamwo wimure bivuye mwikaye canke ikarata ya BCG, PENTA 1,2,3, Polio 1,2,3 Nimba ugucandagwa kwikibondo kutagiye kwandikwa mwikaye canke mwikarata, niwuzuze 99/99/9999.	**Amatariki y'incandago** UMUSI / UKWEZI / 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** **PENTA 2** **PENTA 3** **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?	Ego.....1 Oya.....2 Sinzi 8		
	Nutubarire nimba (vuga izina ry'umwana) yaronse incandago ngira ndakubaze naho rwoba ari rumwe.			

7.	Mbega uyo mwana (muvuge izina) yoba yararonse urucanco rwitwa BCG rukingira igituntu rukaba ruterwa kukuboko rugasiga inkovu?[3]	Ego.....1 Oya.....2 Sinzi 8		
8.	Mbega umwana (vuga izina) yoba yararonse urucanco rukingira ubukangwe rukaba rutangwa nkamama basuka mu kanwa? ***Erekana akarorero kayo mama akingira ubukangwe***	Ego.....1 Oya.....2 → 11 Sinzi .....8 → 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..... ……. ☐ Sinzi…… 8		
11.	Uyo mwana wawe yoba yararonse incanco (urushinge batera kubibero) bagaca batanga uwo mwanya nyene incanco y'ubukangwe (batanga nk'ima mu kanwa)?	Ego.....1 Oya.....2 → Sinzi .....8 → 13 13		
12.	Kangahe?	Incuro zingahe..... ☐ Sinzi……8		
13.	Uyo mwana yoba yaratewe inshinge ituma yirinda agasama?	Ego.....1 Oya.....2 Sinzi 8		

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

IBIBAZO VYOSE BITEGEREZWA KWISHURWA N'ABAVYEYI BAFISE UMWANA ARI MUSI Y'AMEZI 24 YAGWAYE INDWARA YO GUCIBWAMO 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 _____ _____ Imyaka y'umuvyeyi	Izina ry'umwana ari musi y'amezi 24 _____ _____ 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				
<u>INGINGO NGENDERWAKO</u>*: *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.				
	Woba warigeze uja kw'ishure?	Ego……………………………....………… … Oya…………………………......………… …. Sinzi…………………………….................. .. Ntanyishu……………………………….......... ….	1 0 → 88 → 99 →	 3 3 3	
	NIMBA ARI EGO, BAZA: Wagarukiye muwakangahe?	Ntashure…………………………..……….. Amashuri matomato…………..…………..…. Amashuri	1 2 3		

		yisumbuye……..…… 4 Kaminuza …….…… 5 Ayandi……. . (**DONDAGURA)**			
	Murugo rwawe haba abantu bangahe?	Igitigiri…….....……. ….. … Sinzi……..... 88 Ntanyishu ……..... 99			
IKIGABANE CA 2: UKUGWANYA UGUCIBWAQMWO					
	NIMBA UMWANA ARIKO YONSWA ATAKINDI AFUNGURA (ATARI UKWONKA), NUBAZE IKI KIBAZO GUSA UCE UHEZA*.** Igihe uyo mwana ***(muvuge izina) yari arwaye yoba yonkejwe kuruta uko vyahora, canke yarongereje, canke yaragabanije?	Musi yuko vyahora → **HEZA** Angana nuko vyahora → **HEZA** Aruta uko vyahora → **HEZA**			

	Igihe uyo mwana ***(muvuge izina)*** yari arwaye, yoba yahawe **i<u>binyobwa</u>** 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	Inyis
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'isukari ……..B 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

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 _____ _____ Imyaka y'umuvyeyi	Izina ry'umwana ari musi y'amezi 24 _____ _____ 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				
<u>INGINGO NGENDERWAKO</u>: 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.				
	Woba warigeze uja kw'ishure?	Ego……..…… 0 → 3 Oya……..…… 88 → 3 Sinzi…….. 99 → 8 Ntanyishu……..	1	
	NIMBA ARI EGO, BAZA: Wagarukiye muwakangahe?	Ntashure……..……..	1	
		Amashuri matomato……..…	2	
		Amashuri yisumbuye…….……	3	
		Kaminuza …….……	4	
			5	

		Ayandi……. . **(DONDAGURA)**		
	Murugo rwawe haba abantu bangahe?	Igitigiri……..…….. … Sinzi……..... 88 Ntanyishu ……..... 99		
IKIGABANE CA KABIRI: UBUSHUHE BURENZE (MALARIYA YIKETSWE)				
	Mbega uyo mwana ***(Izina)*** yoba yaragize Ubushyuhe bwinshi cane canke Malariya mumayinga abiri aheze?	Ego ..... 1 **Oya……0**		
	Woba waramuvuje canke wararondeye impanuro kubera ubwo bushuhe burenze?	Ego ..... 1 Oya 0		
	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/abagenzi ....8 Ahandi_____ ..... (DONDAGURA)		
#	Ibibazo	Inyishu	Simba	Inyishu

	Kuva atanguye gushuha, wamujanye Kuvugwa canke warondeye impanuro haciye imisi ingahe?	Uyo musi nyene……...0 Umusi ukurikira ……..…1 Mumisi ibiri .....2 Mumisi itatu canke irenga .....3 Sinzi…….……..8		
	Mbega mugihe cokugwara umwana ***(vuga izina ryiwe***) yoba yarafashe Imiti yo kugabanya ubushuhe?	Ego ..... 1 Oya……..2 → **HEZA** Sinzi……8 → **HEZA**		

	Ni iyihe miti yafashe yo kugabanya ubushuhe?[1] ***SHIRA AKAZINGI KUMITI YATANZWE.*** ***UBWO BWOKO BW'IMITI BUTAMENYWE, EREKANA AKARORERO K'UMUTI UVURA MARARIYA.*** **UMUVYEYI ADASHOBOYE KUMENYA UMUTI, MUBAZE AKWEREKE IYO MITI. ADASHOBOYE KUYIKWEREKA, MWEREKE AKARORERO KAYO NAWE YEMEZE IYISA NIYO YAHAWE** ***KUMUTI WOSE YAFASHE BAZA:*** Mbega yafashe imiti nyabaki? Ntayindi miti yafashe? Mbega umwana ***(muvuge izina)*** yatanguye gufata imiti ryari kuva ubushuhe butanguye? ***ANDIKA IBINTU VYOSE BIDONDAGUWE. NUBAZE KUGIRA NGO UMENYE YUKO UBWO BWOKO BW'IMITI IZWI. UBWO BWOKO BW'IMITI BUTAMENYWE, EREKANA AKARORERO K'UMUTI URWANYA MARARIYA.*** ***SHIRA AKAZINGI KUNYISHU IKWIRIYE.*** <u>INYISHU MU MPFUNYAPFUNYO</u>: UWO MUSI NYENE = 0 UMUSI UKURIKIRA = 1	**IMITI IIVURA MALARIYA** A. AMODIAQUINE + Artesunate….. 0 1 2 3 8 B. QUININE……...0 1 2 3 8 **IYINDI MITI** C. PARACETAMOL……..…….0 1 2 3 8 D. IBININI BITAMENYWE…….0 1 2 3 8 E. IYINDI_____0 1 2 3 8 **(IDONDAGURE)**		

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

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 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 _____ Imyaka y'umuvyeyi	Izina ry'umwana ari musi y'amezi 24 _____ 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				
<u>INGINGO NGENDERWAKO</u>: 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.				
	Woba warigeze uja kw'ishure?	Ego……..……. 1 …… 0	→ 3	

		Oya……..…… …. Sinzi……..... ... Ntanyishu…….....	8 8 9 9	3 3	
2	***NIMBA ARI EGO, BAZA:*** Wagarukiye muwakangahe?	Ntashure……..……. Amashuri matomato…….……..… Amashuri yisumbuye…….…… Kaminuza …….…… Ayandi…… .. **(DONDAGURA)**	1 2 3 4 5		
3	**MURUGO RWAWE HABA ABANTU BANGAHE?**	Igitigiri…….. … Sinzi……..... Ntanyishu ……..... 	8 8 9 9		

IKIGABANE CA KABIRI: KUVURA UMUSONGA

4	Igihe ***(vuga izina ry'umwana)*** yagira indwara yo gukorora, mbega yaragize ingorane zo guhemagurika adashikana?	Ego……A Oya ……B ⟶ **HEZA** Sinzi ……..C ⟶ **HEZA**		
5	Woba waramuvuje canke ukaronka impanuro kugirango ngo umwana avugwe iyo nkorora n'uguhemagurika?	Ego……..A Oya……B ⟶ **HEZA**		
6	Ninde yaguhanuye canke yavuye umwana wawe ***(vuga izina)***? Ntawundi? ***ANDIKA IBIVUZWE VYOSE***	Dogiteri……..A Umuforoma/ umuforomakazi……B Abaremeshakiyago ……C Abandi_____D _____		

Murakoze! Turahejeje ibibazo. Turabashimiye ko mwafashe umwanya mukatwishura kubibazo. Mwoba mufise ikibazo cokumbaza muri aka kanya?

***<u>Umwihwezo w'uwabajije</u>*:**

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 _____

APPENDIX D. RAW DATA TABLES

0-23 Months

DEMOGRAPHIC DATA

Age of the child (in months)	Frequency	Percent	Cum Percent
0	3	3.10%	3.10%
1	2	2.10%	5.20%
3	4	4.20%	9.40%
4	3	3.10%	12.50%
5	3	3.10%	15.60%
6	1	1.00%	16.70%
7	6	6.30%	22.90%
8	2	2.10%	25.00%
9	2	2.10%	27.10%
10	6	6.30%	33.30%
11	3	3.10%	36.50%
12	1	1.00%	37.50%
13	3	3.10%	40.60%
14	3	3.10%	43.80%
15	9	9.40%	53.10%
16	4	4.20%	57.30%
17	10	10.40%	67.70%
18	3	3.10%	70.80%

19	8	8.30%	79.20%	
20	5	5.20%	84.40%	
21	5	5.20%	89.60%	
22	5	5.20%	94.80%	
23	5	5.20%	100.00%	
Total	96	100.00%	100.00%	

Sex Of Child	**Frequency**	**Percent**	**Cum Percent**	
Male	53	55.20%	55.20%	
Female	43	44.80%	100.00%	
Total	96	100.00%	100.00%	

Maternal and Newborn Care

Q4.During your pregnancy with did you sleep under a mosquito net?	**Frequency**	**Percent**	**Cum Percent**	
No	32	33.30%	33.30%	
Yes	64	66.70%	100.00%	
Total	96	100.00%	100.00%	

Q5.Did you sleep under the net all the time, most of the time, some of the time, or occasionally?	**Frequency**	**Percent**	**Cum Percent**	
A. All of the time	54	84.40%	84.40%	
B. Most of the time	6	9.40%	93.80%	
C. Some of the time	4	6.30%	100.00%	
Total	64	100.00%	100.00%	

Q6.During your pregnancy with (Name), did you receive antenatal care?	**Frequency**	**Percent**	**Cum Percent**	
Yes	96	100.00%	100.00%	
Total	96	100.00%	100.00%	

Q7.Number of months (Pregnancy) at the first antenatal care?	Frequency	Percent
1-3 Months	54	56.25%
4-6 Months	39	40.63%
7-9 Months	3	3.13%
Total	96	100.00%

Q8.During your pregnancy with (Name) did you receive TTV?	Frequency	Percent	Cum Percent
No	22	22.90%	22.90%
Yes	74	77.10%	100.00%
Total	96	100.00%	100.00%

Q9.While pregnant with (name), how many times did you receive TTV?	Frequency	Percent	Cum Percent
One	30	31.30%	31.30%
Two	27	28.10%	59.40%
Three or more	16	16.70%	76.00%
Don't know	1	1.00%	77.10%
N/A	22	22.90%	100.00%
Total	96	100.00%	100.00%

Q10. Did you receive any TTV at any time before that pregnancy?	Frequency	Percent	Cum Percent
No	6	6.30%	6.30%
Yes	90	93.80%	100.00%
Total	96	100.00%	100.00%

SEE FOOTNOTE

Q11.If yes, how many times did you receive it before pregnancy?	Frequency	Percent	Cum Percent
No	6	6.30%	6.30%
Less than two	2	2.10%	8.30%
Two or more	83	86.50%	

			94.80%	
Don't know	5	5.20%	100.00%	
Total	96	100.00%	100.00%	

SEE ENDNOTE[xiii]

Q12. Who assisted with the delivery of (Name)?	**Frequency**	**Percent**	**Cum Percent**	
A. Doctor	3	3.10%	3.10%	
B. Nurse	75	78.10%	81.30%	
D. Traditional Birth Attendant	8	8.30%	89.60%	
F. Relative/Friend/ Neighbor	6	6.30%	95.80%	
G. No One	4	4.20%	100.00%	
Total	96	100.00%	100.00%	

Q12. Who assisted with the delivery of (Name)?	**Frequency**	**Percent**	**Cum Percent**	
No one	4	4.20%	4.20%	
Skilled Birth Attendant	78	81.30%	85.40%	
Non Skilled Birth Attendant	14	14.60%	100.00%	
Total	96	100.00%	100.00%	

Q13. After his birth,did any health care provider or traditional birth attendant check on health?	**Frequency**	**Percent**	**Cum Percent**	
No	23	24.00%	24.00%	
Yes	73	76.00%	100.00%	
Total	96	100.00%	100.00%	

Q14. How many hours, days or weeks after the birth of (Name) did the first check take place?	**Frequency**	**Percent**	**Cum Percent**	
No	23	24.00%	24.00%	
Within Three first days	64	66.70%	90.60%	
After three days	5	5.20%	95.80%	

Don't Know	4	4.20%	100.00%	
Total	96	100.00%	100.00%	

Q15.Who checked on (Name's) health at that time?	**Frequency**	**Percent**	**Cum Percent**	
Doctor	2	2.70%	2.70%	
Nurse	71	97.30%	100.00%	
Total	73	100.00%	100.00%	

ILLNESS RECOGNITION

Q16B Looks Unwell Or Not Playing Normally	**Frequency**	**Percent**	**Cum Percent**	
Yes	45	46.90%	46.90%	
No	51	53.10%	100.00%	
Total	96	100.00%	100.00%	

Q16E _High Fever	**Frequency**	**Percent**	**Cum Percent**	
Yes	91	94.80%	94.80%	
No	5	5.20%	100.00%	
Total	96	100.00%	100.00%	

Q16F _Fast Or Difficult Breathing	**Frequency**	**Percent**	**Cum Percent**	
Yes	14	14.60%	14.60%	
No	82	85.40%	100.00%	
Total	96	100.00%	100.00%	

Q16G_Vomits Everything	**Frequency**	**Percent**	**Cum Percent**	
Yes	39	40.60%	40.60%	
No	57	59.40%	100.00%	
Total	96	100.00%	100.00%	

Q16H_Convulsions	Frequency	Percent	Cum Percent
Yes	1	1.00%	1.00%
No	95	99.00%	100.00%
Total	96	100.00%	100.00%

Q16C_Not Eating Or Drinking	Frequency	Percent	Cum Percent
Yes	43	44.80%	44.80%
No	53	55.20%	100.00%
Total	96	100.00%	100.00%

Q16KOther	Frequency	Percent	Cum Percent
agitations	1	1.90%	1.90%
Child crying every time	1	1.90%	3.80%
Constipation	1	1.90%	5.80%
cough	8	15.40%	21.20%
Cough, crying, diarrhea, not appetite	1	1.90%	23.10%
Cough, diarrhea	2	3.80%	26.90%
Cough, Rhume	1	1.90%	28.80%
Cough,diarrhea	1	1.90%	30.80%
Cough,diarrhea,guturika kumubiri	1	1.90%	32.70%
Crying everytime	1	1.90%	34.60%
Darrhea, Kwama amahere ku mubiri	1	1.90%	36.50%
Diarrhe, cough	1	1.90%	38.50%
Diarrhea	14	26.90%	65.40%
Diarrhea, cough, eruption	2	3.80%	69.20%
Diarrhea, cought	1	1.90%	71.20%
Diarrhea, Crying	1	1.90%	73.10%
Diarrhea, Crying everywhere	1	1.90%	75.00%
Diarrhea, kugangabuka	2	3.80%	78.80%
Dierrhea	1	1.90%	80.80%
Eruption	1	1.90%	82.70%
Eruption, cough	1	1.90%	84.60%
Impanga	1	1.90%	86.50%
Never sick	1	1.90%	88.50%
No sleeping	1	1.90%	90.40%
skin eruptions	1	1.90%	92.30%
So cough	1	1.90%	94.20%
tired	1	1.90%	

			96.20%	
To vomit	1	1.90%	98.10%	
Vomit, cough, eyes	1	1.90%	100.00%	
Total	52	100.00%	100.00%	

% of mothers of children age 0-23 months who know at least two signs for seeking immediate care when their child is sick	**Frequency**	**Percent**	**Cum Percent**	
No	13	13.50%	13.50%	
Yes	83	86.50%	100.00%	
Total	96	100.00%	100.00%	

Q17. Did (NAME) experience any of the following in the past two weeks?	**Frequency**	**Percent**
Diarrhea	45	46.88%
Cough (BCD)	55	57.29%
Fever or Malaria	51	53.13%
Convulsions	0	0.00%
Conjonctivitis	3	3.13%
Dermatis	2	2.08%
None	20	20.83%

WATER AND SANITATION

Q18.Do you treat your water in any way to make it safer for drinking?	**Frequency**	**Percent**	**Cum Percent**	
No	37	38.50%	38.50%	
Yes	59	61.50%	100.00%	
Total	96	100.00%	100.00%	

Q19. what do you usually do to the water to make it safer to drink?	**Frequency**	**Percent**	**Cum Percent**	
Nothing	37	38.50%	38.50%	
Appropriate treatment	4	4.20%	42.70%	
Non Appropriate treatment	54	56.30%	99.00%	
Don't know	1	1.00%	100.00%	
Total	96	100.00%	100.00%	

Q20. In HH with soap at the place for handwashing, mother washs hands with soap after defecation and at one other appropriate time	Frequency	Percent	Cum Percent
No	59	61.50%	61.50%
Yes	37	38.50%	100.00%
Total	96	100.00%	100.00%

Q21.Can you show me where you usually wash your hands and what you use to wash hands?	Frequency	Percent	Cum Percent
Inside/Near Kitchen/Cooking Place	10	10.40%	10.40%
Elsewhere In Yard	41	42.70%	53.10%
Outside Yard	9	9.40%	62.50%
No Specific Place	36	37.50%	100.00%
Total	96	100.00%	100.00%

Q22. Is there soap or detergent or locally used cleansing agent?	Frequency	Percent	Cum Percent
Soap	45	46.90%	46.90%
Ash	1	1.00%	47.90%
None	50	52.10%	100.00%
Total	96	100.00%	100.00%

Wash hands with soap at two or more appropriate times	Frequency	Percent	Cum Percent
Yes	59	61.50%	61.50%
No	37	38.50%	100.00%
Total	96	100.00%	100.00%

Q23.What kind of toilet facility do you have? Can I see it?	Frequency	Percent	Cum Percent
Open latrine	81	84.40%	84.40%
Closed latrine	14	14.60%	99.00%
No permission to see	1	1.00%	100.00%
Total	96	100.00%	100.00%

Q24. The last time (name of child) passed stools, where were the feces disposed of?	Frequency	Percent
Disposed into a latrine or toilet facility	76	79.20%
Disposed into a garbage/trash bin	10	10.40%
Disposed of somewhere near the house:Dug and buried	5	5.20%
Disposed of somewhere near the house:Did not bury	1	1.00%
Disposed of somewhere far from the house:Dug and buried	5	5.20%
Disposed of somewhere far from the house:Did not bury	0	0.00%

E. MALARIA PREVENTION

Q25. Does your household have any mosquito nets that can be used while sleeping?	Frequency	Percent	Cum Percent
No	24	25.00%	25.00%
Yes	72	75.00%	100.00%
Total	96	100.00%	100.00%

B.Child slept under LLITNe)	Frequency	Percent	Cum Percent
Yes	62	64.60%	64.60%
No	34	35.40%	100.00%
Total	96	100.00%	100.00%

ANTROPOMETRIC

Q30A.May I weigh (name of child)?	Frequency	Percent	Cum Percent
Yes	96	100.00%	100.00%
Total	96	100.00%	100.00%

Q33. Nutrition Status: Weight for Age	Frequency	Percent	Cum Percent
Good nutrition status (>-2SD)	61	63.50%	63.50%
Moderate underweight (-2≤SD≥-3)	30	31.30%	94.80%

Severe underweight (<-3SD)	5	5.20%	100.00%
Total	96	100.00%	100.00%

Q30B. Weight (name of child)?	Frequency	Percent	Cum Percent
2.6	1	1.00%	1.00%
3.9	1	1.00%	2.10%
4.2	1	1.00%	3.10%
4.7	1	1.00%	4.20%
5	2	2.10%	6.30%
5.5	1	1.00%	7.30%
5.9	1	1.00%	8.30%
6.5	3	3.10%	11.50%
6.6	2	2.10%	13.50%
6.7	2	2.10%	15.60%
6.8	1	1.00%	16.70%
6.9	2	2.10%	18.80%
7	3	3.10%	21.90%
7.2	3	3.10%	25.00%
7.3	3	3.10%	28.10%
7.4	1	1.00%	29.20%
7.5	1	1.00%	30.20%
7.6	1	1.00%	31.30%
7.7	1	1.00%	32.30%
7.9	1	1.00%	33.30%
8	5	5.20%	38.50%
8.1	1	1.00%	39.60%
8.2	4	4.20%	43.80%
8.4	1	1.00%	44.80%
8.5	9	9.40%	54.20%
8.6	3	3.10%	57.30%
8.7	1	1.00%	58.30%
8.8	1	1.00%	59.40%
8.9	1	1.00%	60.40%

9	1	1.00%	61.50%	
9.1	2	2.10%	63.50%	
9.4	1	1.00%	64.60%	
9.5	8	8.30%	72.90%	
9.6	2	2.10%	75.00%	
9.7	2	2.10%	77.10%	
9.8	3	3.10%	80.20%	
9.9	1	1.00%	81.30%	
10	2	2.10%	83.30%	
10.1	2	2.10%	85.40%	
10.2	2	2.10%	87.50%	
10.3	2	2.10%	89.60%	
10.4	2	2.10%	91.70%	
10.5	2	2.10%	93.80%	
10.6	1	1.00%	94.80%	
10.8	1	1.00%	95.80%	
11	1	1.00%	96.90%	
11.6	1	1.00%	97.90%	
12.1	1	1.00%	99.00%	
12.2	1	1.00%	100.00%	
Total	96	100.00%	100.00%	

0-5 Months

DEMOGRAPHIC DATA

Age of the child (in months)	Frequency	Percent	Cum Percent	
0	18	18.80%	18.80%	
1	13	13.50%	32.30%	
2	12	12.50%	44.80%	
3	21	21.90%	66.70%	
4	16	16.70%	83.30%	

5	15	15.60%	99.00%	
6	1	1.00%	100.00%	
Total	96	100.00%	100.00%	

Sex Of Child	**Frequency**	**Percent**	**Cum Percent**
Male	39	40.60%	40.60%
Female	57	59.40%	100.00%
Total	96	100.00%	100.00%

BREASTFEEDING

Q4.How long after birth did you first put (name of child) to the breast?	**Frequency**	**Percent**	**Cum Percent**
A. Immediately/within first hour after delivery	80	83.30%	83.30%
B. Same day, After the first hour after delivery	11	11.50%	94.80%
C. Same day, After the first hour after delivery	4	4.20%	99.00%
D- More than 24 hours after delivery	1	1.00%	100.00%
Total	**96**	**100.00%**	**100.00%**

Q5.Did you give anything to (name of child) before the first breastfeeding?	**Frequency**	**Percent**	**Cum Percent**
A. Yes	6	6.30%	6.30%
B. No	89	92.70%	99.00%
C. Don't know	1	1.00%	100.00%
Total	96	100.00%	100.00%

Q6. Now I would like to ask you about liquids or foods (NAME) had yesterday during the day or at night.	**Frequency**	**Percent**
A. Breast milk	96	100.00%
B. Plain water	11	11.50%
C. Cow Milk	1	1.00%
D. Banana Juce	0	0.00%
E. Commercially produced infant formula	0	0.00%
F. Any fortified, commercially available infant and young child food (e.g. Cerelac)	0	0.00%

G. Any (other) porridge or gruel	4	4.20%

% of children age 0-5 months who were exclusively breastfed during the last 24 hours	Frequency	Percent	Cum Percent
No	13	13.50%	13.50%
Yes	83	86.50%	100.00%
Total	96	100.00%	100.00%

% of children age 0-5 months who were exclusively breastfed with no prelacteal feeding	Frequency	Percent
Breastfeed within the first hour with no prelactal feeds	76	79.17%
Breastfeed the first hour with prelactal feeds	3	3.13%
Breastfeed after the first hour or more	16	16.67%
Don't know	1	1.04%
Total	96	100.00%

6-23 Months

DEMOGRAPHIC DATA

Age Of The Child (In Months	Frequency	Percent	Cum Percent
6	6	6.30%	6.30%
7	9	9.40%	15.60%
8	3	3.10%	18.80%
9	3	3.10%	21.90%
10	8	8.30%	30.20%
11	5	5.20%	35.40%
12	4	4.20%	39.60%
13	3	3.10%	42.70%
14	4	4.20%	46.90%
15	7	7.30%	54.20%
16	8	8.30%	62.50%
17	9	9.40%	71.90%
18	3	3.10%	75.00%

19	4	4.20 %	79.20 %
20	3	3.10 %	82.30 %
21	4	4.20 %	86.50 %
22	8	8.30 %	94.80 %
23	5	5.20 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Sex Of Child	**Frequency**	**Percent**	**Cum Percent**
Male	48	50.00 %	50.00 %
Female	48	50.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

NUTRITION

Q4. I would like to ask you about liquids or foods the child had yesterday or at night?

A.Breast milk?	**Frequency**	**Percent**	**Cum Percent**
No	7	7.30 %	7.30 %
Yes	89	92.70 %	100.0 0%
Total	96	100.0 0%	100.0 0%

B.Plain water?	**Frequency**	**Percent**	**Cum Percent**
No	12	12.50 %	12.50 %
Yes	84	87.50 %	100.0 0%
Total	96	100.0 0%	100.0 0%

C.Cow Milk	**Frequency**	**Percent**	**Cum Percent**
No	95	99.00 %	99.00 %
Yes	1	1.00 %	100.0 0%

Total	96	100.00%	100.00%

D.Banana Juce	**Frequency**	**Percent**	**Cum Percent**
No	80	83.30%	83.30%
Yes	16	16.70%	100.00%
Total	96	100.00%	100.00%

E.Commercially produced infant formula?	**Frequency**	**Percent**	**Cum Percent**
No	95	99.00%	99.00%
Yes	1	1.00%	100.00%
Total	96	100.00%	100.00%

F.Any fortified, commercially available infant and young child food	**Frequency**	**Percent**	**Cum Percent**
No	96	100.00%	100.00%
Total	96	100.00%	100.00%

G.Any (other) porridge or gruel?	**Frequency**	**Percent**	**Cum Percent**
No	47	49.00%	49.00%
Yes	49	51.00%	100.00%
Total	96	100.00%	100.00%

Q5A. Commercially produced infant formula?	**Frequency**	**Percent**	**Cum Percent**
No	95	99.00%	99.00%
Don't know	1	1.00%	100.00%
Total	96	100.00%	100.00%

Q5B. Milk such as tinned, powdered, or fresh cow milk?	**Frequency**	**Percent**	**Cum Percent**

No	95	99.00 %	99.00 %
Don't Know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q5C. Yogurt or other milk products?	**Frequency**	**Percent**	**Cum Percent**
No	93	96.90 %	96.90 %
Yes	2	2.10 %	99.00 %
Don't know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q5.D. Any fortified, commercially available infant and young child food (e.g. Cerelac)	**Frequency**	**Percent**
No	91	94.80 %
Yes	4	4.20 %
Don't know	1	1.00 %
Total	96	100.0 0%

Q5. E. Any other porridge?	**Frequency**	**Percent**	**Cum Percent**
No	47	49.00 %	49.00 %
Yes	48	50.00 %	99.00 %
Don't know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q5F. Bread, rice, maize or other foods made from grains?	**Frequency**	**Percent**	**Cum Percent**
No	44	45.80 %	45.80 %
Yes	51	53.10 %	99.00 %
Don't know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q5G. White potatoes, white yams, cassava, or any other foods made from roots?	**Frequency**	**Percent**	**Cum Percent**

No	36	37.50 %	37.50 %
Yes	59	61.50 %	99.00 %
Don't know	1	1.00 %	100.00%
Total	96	100.00%	100.00%

Q5H. Squash, carrots or sweet potatoes that are yellow or orange inside?	Frequency	Percent	Cum Percent
No	77	80.20 %	80.20 %
Yes	18	18.80 %	99.00 %
Don't know	1	1.00 %	100.00%
Total	96	100.00%	100.00%

Q5J. Ripe mangoes, papayas or tomato?	Frequency	Percent	Cum Percent
No	57	59.40 %	59.40 %
Yes	38	39.60 %	99.00 %
Don't know	1	1.00 %	100.00%
Total	96	100.00%	100.00%

Q5I. Any dark green leafy vegetables	Frequency	Percent	Cum Percent
No	22	22.90 %	22.90 %
Yes	73	76.00 %	99.00 %
Don't know	1	1.00 %	100.00%
Total	96	100.00%	100.00%

Q5.K. Foods made with red palm oil?	Frequency	Percent	Cum Percent
No	10	10.40 %	10.40 %
Yes	85	88.50 %	99.00 %
Don't know	1	1.00	100.0

		%	0%
Total	96	100.0 0%	100.0 0%

Q5 L. Any other fruits or vegetables like oranges, mushroom, pineapple,eggplant, avocado or banana?	**Frequency**	**Percent**	**Cum Percent**
No	33	34.40 %	34.40 %
Yes	62	64.60 %	99.00 %
Don't know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q.5M. Eggs?	**Frequency**	**Percent**	**Cum Percent**
No	84	87.50 %	87.50 %
Yes	11	11.50 %	99.00 %
Don't know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q5. N. Liver, kidney, heart or other organ meats?	**Frequency**	**Percent**	**Cum Percent**
No	88	91.70 %	91.70 %
Yes	7	7.30 %	99.00 %
Don't know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q5O. Blood from cows	**Frequency**	**Percent**	**Cum Percent**
No	94	97.90 %	97.90 %
Yes	1	1.00 %	99.00 %
Don't know	1	1.00 %	100.0 0%
Total	96	100.0 0%	100.0 0%

Q5P. Any meat, such as beef, pork, goat, lamb, chicken, duck, rats, gopher, rabbit, dove or quail?	**Frequency**	**Percent**	**Cum Percent**
No	87	90.60	90.60

		%	%	
Yes	8	8.30 %	99.00 %	
Don't know	1	1.00 %	100.0 0%	
Total	96	100.0 0%	100.0 0%	

Q5. R. Fresh or dried fish?	Frequency	Percent	Cum Percent	
No	46	47.90 %	47.90 %	
Yes	49	51.00 %	99.00 %	
Don't know	1	1.00 %	100.0 0%	
Total	96	100.0 0%	100.0 0%	

Q5. S. Grubs, snails or insects ?	Frequency	Percent	Cum Percent	
No	94	97.90 %	97.90 %	
Yes	1	1.00 %	99.00 %	
Don't know	1	1.00 %	100.0 0%	
Total	96	100.0 0%	100.0 0%	

Q5. T. Any foods made from beans, peas, nuts and lentils ?	Frequency	Percent	Cum Percent	
No	23	24.00 %	24.00 %	
Yes	72	75.00 %	99.00 %	
Don't know	1	1.00 %	100.0 0%	
Total	96	100.0 0%	100.0 0%	

Q5. U. Any kinds of oils (ibiyoba, ibihoke, isoya), fats, butter, or foods made with any of these?	Frequency	Percent	Cum Percent	
No	84	87.50 %	87.50 %	
Yes	11	11.50 %	99.00 %	
Don't know	1	1.00 %	100.0 0%	
Total	96	100.0 0%	100.0 0%	

Q5. V. Tea or coffee?	Frequency	Percent	Cum Percent

No	87	90.60 %	90.60 %
Yes	8	8.30 %	99.00 %
Don't know	1	1.00 %	100.00%
Total	96	100.00%	100.00%

Q5. W. Any other liquids (such as banana juice)?	Frequency	Percent	Cum Percent
No	87	91.60 %	91.60 %
Yes	7	7.40 %	98.90 %
Don't know	1	1.10 %	100.00%
Total	95	100.00%	100.00%

Q5. Y. Any sugary foods, sweets, pastries, donut, biscuits, pop/soda, sugar cane, or honey?	Frequency	Percent	Cum Percent
No	55	57.30 %	57.30 %
Yes	41	42.70 %	100.00%
Total	96	100.00%	100.00%

Q5. Z. Any other food not mentioned?	Frequency	Percent	Cum Percent
No	87	92.60 %	92.60 %
Yes	7	7.40 %	100.00%
Total	94	100.00%	100.00%

Q5. b. Now I would like to ask you about (other) liquids or foods that (name of child) 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	Frequency	Percent	Cum Percent
A. Breastfed children drinking or eating at least one food of each three or more food groups	83	86.50 %	86.50 %
B. Breastfed children drinking or eating at least one food from less than three food groups.	6	6.30 %	92.70 %
D. Non breastfed children did NOT drink milk and eat at least one food from each 4 groups as recommended	7	7.30 %	100.00%

Total	96	100.0 0%	100.0 0%	

Mean number of food groups eaten in the last 24 hours by children age 6-23 months

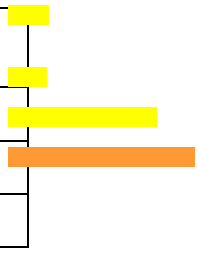
Respondant	# of Food groups/Respondant
1	7
2	6
3	3
4	7
5	5
6	7
7	6
8	5
9	5
10	5
11	4
12	5
13	6
14	4
15	6
16	3
17	6
18	5
19	4
20	7
21	3
22	4
23	3
24	2
25	4
26	4
27	5
28	1
29	5
30	6
31	3
32	5
33	1
34	5
35	5

36	3
37	4
38	6
39	5
40	5
41	4
42	4
43	4
44	3
45	4
46	3
47	4
48	4
49	5
50	3
51	3
52	4
53	4
54	5
55	5
56	4
57	6
58	1
59	3
60	5
61	7
62	8
63	5
64	4
65	4
66	6
67	6
68	5
69	3
70	6
71	5
72	5
73	6
74	4
75	6
76	5
77	5
78	5

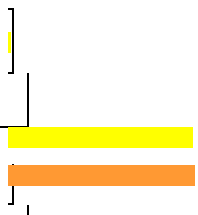
79	4
80	6
81	5
82	7
83	6
84	4
85	5
86	1
87	7
88	6
89	3
90	2
91	5
92	5
93	6
94	6
95	4
96	5
Mean	**4.64**

VITAMIN A SUPPLEMENTATION

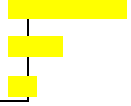
Q6. Has (NAME) ever received a vitamin A dose (like this/any of these)?	Frequency	Percent	Cum Percent
No	18	18.80%	18.80%
Yes	78	81.30%	100.00%
Total	96	100.00%	100.00%



Q7. Did (name of child) receive a Vitamin A does within the last 6 months?	Frequency	Percent	Cum Percent
No	1	1.30%	1.30%
Yes	77	98.70%	100.00%
Total	78	100.00%	100.00%



Q8ReceiveC	Frequency	Percent	Cum Percent
Yes, interviewer sees the card	46	59.00%	59.00%
Yes, but card is missing or lost	21	26.90%	85.90%
No, never had a card	11	14.10%	100.00%



Total	78	100.0 0%	100.0 0%

Q9VitaminA1	Frequency	Percent	Cum Percent
9/9/8999	20	43.50 %	43.50 %
5/18/2009	1	2.20 %	45.70 %
6/23/2009	1	2.20 %	47.80 %
11/23/2009	1	2.20 %	50.00 %
12/2/2009	1	2.20 %	52.20 %
12/7/2009	1	2.20 %	54.30 %
12/30/2009	1	2.20 %	56.50 %
1/4/2010	1	2.20 %	58.70 %
1/5/2010	1	2.20 %	60.90 %
1/23/2010	1	2.20 %	63.00 %
2/16/2010	1	2.20 %	65.20 %
2/19/2010	1	2.20 %	67.40 %
3/1/2010	1	2.20 %	69.60 %
3/30/2010	1	2.20 %	71.70 %
5/7/2010	2	4.30 %	76.10 %
6/18/2010	1	2.20 %	78.30 %
7/7/2010	1	2.20 %	80.40 %
8/4/2010	1	2.20 %	82.60 %
8/5/2010	1	2.20 %	84.80 %
8/18/2010	1	2.20 %	87.00 %
9/1/2010	2	4.30 %	91.30 %
9/7/2010	1	2.20 %	93.50 %
9/10/2010	1	2.20 %	95.70 %
9/17/2010	1	2.20 %	97.80 %
9/21/2010	1	2.20 %	100.0 0%
Total	46	100.0 0%	100.0 0%

Q9Vitamin2	Frequency	Percent	Cum Percent
9/9/9999	42	91.30%	91.30%
3/1/2010	1	2.20%	93.50%
9/13/2010	1	2.20%	95.70%
9/27/2010	1	2.20%	97.80%
10/1/2010	1	2.20%	100.00%
Total	46	100.00%	100.00%

Q9Vitamin3	Frequency	Percent	Cum Percent
9/9/9999	46	100.00%	100.00%
Total	46	100.00%	100.00%

12-23 Months

Penta3 vaccine according to the vaccination card or mother's recall	Frequency	Percent	Cum Percent
No	9	9.38%	9.38%
Yes	87	90.60%	100.00%
Total	96	100.00%	100.00%

DEMOGRAPHIC DATA

Sex Of Child	Frequency	Percent	Cum Percent
Male	50	52.10%	52.10%
Female	46	47.90%	100.00%
Total	96	100.00%	100.00%

IMMUNIZATION

Q4.Did you receive a Vaccination or Vitamin A card?	Frequency	Percent	Cum Percent

A-Yes, card seen	64	66.70%	66.70%	
B-Yes, card missing	30	31.30%	97.90	
C-Never had card	2	2.10%	100.00%	
Total	96	100.00%	100.00%	

Vaccinations copied from card	**No**		**Yes**	
	Frequency	**Percent**	**Frequency**	**Percent**
BCG	2	3.13%	62	96.88%
POLIO 0	5	7.81%	59	92.19%
POLIO 1	3	4.69%	61	95.31%
POLIO 2	4	6.25%	60	93.75%
POLIO 3	3	4.69%	61	95.31%
PENTA 1	3	4.69%	61	95.31%
PENTA 2 [xiv]	3	4.69%	61	95.31%
PENTA 3	4	6.25%	60	93.75%
Measles	9	14.06%	55	85.94%

Measles vaccine according to the vaccination card or mother's recall	**Frequency**	**Percent**	**Cum Percent**	
No	9	9.40%	9.40%	
Yes	87	90.60%	100.00	
Total	96	100.00%	100.00%	

PENTAVALENT 1 vaccine according to the vaccination card or mother's recall (PENTA 3 indicator is above demographic data, above)	**Frequency**	**Percent**	**Cum Percent**	
No	4	4.20%	4.20	
Yes	92	95.80%	100.00%	
Total	96	100.00%	100.00%	

BCG vaccine copied from card	**Frequency**	**Percent**	**Cum Percent**	
9/9/1999	2	3.10%	3.10%	
7/10/2008	1	1.60%	4.70	
19-10-2008	1	1.60%	6.30%	
5/11/2008	1	1.60%	7.80%	
15-11-2008	1	1.60%	9.40%	

18-11-2008	1	1.60%	10.90%
25-11-2008	1	1.60%	12.50%
9/12/2008	1	1.60%	14.10%
10/12/2008	1	1.60%	15.60%
12/12/2008	1	1.60%	17.20%
31-12-2008	1	1.60%	18.80%
2/1/2009	1	1.60%	20.30%
7/1/2009	1	1.60%	21.90%
12/1/2009	1	1.60%	23.40%
16-1-2009	1	1.60%	25.00%
19-1-2009	1	1.60%	26.60%
25-2-2009	3	4.70%	31.30%
4/3/2009	2	3.10%	34.40%
6/3/2009	1	1.60%	35.90%
18-3-2009	1	1.60%	37.50%
31-3-2009	1	1.60%	39.10%
1/4/2009	1	1.60%	40.60%
3/4/2009	1	1.60%	42.20%
15-4-2009	2	3.10%	45.30%
17-4-2009	1	1.60%	46.90%
22-4-2009	1	1.60%	48.40%
28-4-2009	1	1.60%	50.00%
7/5/2009	1	1.60%	51.60%
8/5/2009	1	1.60%	53.10%
11/5/2009	1	1.60%	54.70%
12/5/2009	1	1.60%	56.30%
20-5-2009	2	3.10%	59.40%
25-5-2009	2	3.10%	62.50%
27-5-2009	1	1.60%	64.10%
2/6/2009	1	1.60%	65.60%
3/6/2009	1	1.60%	67.20%
12/6/2009	1	1.60%	68.80%
15-6-2009	1	1.60%	70.30%

3/7/2009	2	3.10%	73.40%	
5/7/2009	1	1.60%	75.00%	
8/7/2009	2	3.10%	78.10%	
10/7/2009	2	3.10%	81.30%	
15-7-2009	1	1.60%	82.80%	
22-7-2009	1	1.60%	84.40%	
7/8/2009	1	1.60%	85.90%	
10/8/2009	1	1.60%	87.50%	
14-8-2009	2	3.10%	90.60%	
19-8-2009	1	1.60%	92.20%	
2/9/2009	1	1.60%	93.80%	
10/9/2009	1	1.60%	95.30%	
2/10/2009	1	1.60%	96.90%	
16-10-2009	1	1.60%	98.40%	
30-10-2009	1	1.60%	100.00%	
Total	64	100.00%	100.00%	

POLIO 0 vaccine copied from card	**Frequency**	**Percent**	**Cum Percent**	
9/9/9999	5	7.80%	7.80%	
7/10/2008	1	1.60%	9.40%	
19-10-2008	1	1.60%	10.90%	
5/11/2008	1	1.60%	12.50%	
15-11-2008	1	1.60%	14.10%	
18-11-2008	1	1.60%	15.60%	
25-11-2008	1	1.60%	17.20%	
10/12/2008	1	1.60%	18.80%	
12/12/2008	1	1.60%	20.30%	
30-12-2008	1	1.60%	21.90%	
31-12-2008	1	1.60%	23.40%	
7/1/2009	1	1.60%	25.00%	
12/1/2009	1	1.60%	26.60%	
16-1-2009	1	1.60%	28.10%	
19-1-2009	1	1.60%	29.70%	
25-2-2009	3	4.70%	34.40%	

4/3/2009	2	3.10%	37.50%
6/3/2009	1	1.60%	39.10%
18-3-2009	1	1.60%	40.60%
31-3-2009	1	1.60%	42.20%
1/4/2009	1	1.60%	43.80%
3/4/2009	1	1.60%	45.30%
15-4-2009	2	3.10%	48.40%
17-4-2009	1	1.60%	50.00%
22-4-2009	1	1.60%	51.60%
28-4-2009	1	1.60%	53.10%
8/5/2009	1	1.60%	54.70%
11/5/2009	1	1.60%	56.30%
12/5/2009	1	1.60%	57.80%
20-5-2009	2	3.10%	60.90%
25-5-2009	2	3.10%	64.10%
27-5-2009	1	1.60%	65.60%
2/6/2009	1	1.60%	67.20%
3/6/2009	1	1.60%	68.80%
12/6/2009	1	1.60%	70.30%
15-6-2009	1	1.60%	71.90%
3/7/2009	2	3.10%	75.00%
5/7/2009	1	1.60%	76.60%
8/7/2009	2	3.10%	79.70%
10/7/2009	2	3.10%	82.80%
15-7-2009	1	1.60%	84.40%
22-7-2009	1	1.60%	85.90%
7/8/2009	1	1.60%	87.50%
10/8/2009	1	1.60%	89.10%
14-8-2009	2	3.10%	92.20%
19-8-2009	1	1.60%	93.80%
10/9/2009	1	1.60%	95.30%
2/10/2009	1	1.60%	96.90%
16-10-2009	1	1.60%	98.40%

30-10-2009	1	1.60%	100.00%	
Total	64	100.00%	100.00%	

POLIO 1 vaccine copied from card	Frequency	Percent	Cum Percent	
9/9/9999	3	4.70%	4.70%	
24-10-2008	1	1.60%	6.30%	
14-11-2008	1	1.60%	7.80	
30-11-2008	1	1.60%	9.40%	
4/12/2008	1	1.60%	10.90%	
29-12-2008	1	1.60%	12.50%	
30-12-2008	1	1.60%	14.10	
19-1-2009	1	1.60%	15.60%	
20-1-2009	1	1.60%	17.20%	
22-1-2009	1	1.60%	18.80%	
30-1-2009	1	1.60%	20.30	
13-2-2009	1	1.60%	21.90%	
27-2-2009	2	3.10%	25.00%	
3/3/2009	1	1.60%	26.60%	
26-3-2009	1	1.60%	28.10	
1/4/2009	1	1.60%	29.70%	
7/4/2009	1	1.60%	31.30%	
9/4/2009	1	1.60%	32.80%	
15-4-2009	1	1.60%	34.40	
22-4-2009	1	1.60%	35.90%	
27-4-2009	1	1.60%	37.50%	
28-4-2009	1	1.60%	39.10%	
27-5-2009	1	1.60%	40.60	
29-5-2009	1	1.60%	42.20%	
31-5-2009	1	1.60%	43.80%	
3/6/2009	1	1.60%	45.30%	
15-6-2009	1	1.60%	46.90	
19-6-2009	3	4.70%	51.60%	
30-6-2009	1	1.60%	53.10%	
2/7/2009	2	3.10%	56.30%	

3/7/2009	1	1.60%	57.80%
8/7/2009	2	3.10%	60.90%
13-7-2009	1	1.60%	62.50%
16-7-2009	1	1.60%	64.10%
31-7-2009	2	3.10%	67.20%
3/8/2009	2	3.10%	70.30%
4/8/2009	1	1.60%	71.90%
11/8/2009	2	3.10%	75.00%
12/8/2009	1	1.60%	76.60%
14-8-2009	1	1.60%	78.10%
21-8-2009	1	1.60%	79.70%
26-8-2009	1	1.60%	81.30%
2/9/2009	1	1.60%	82.80%
9/9/2009	1	1.60%	84.40%
14-9-2009	1	1.60%	85.90%
16-9-2009	2	3.10%	89.10%
18-9-2009	1	1.60%	90.60%
24-9-2009	1	1.60%	92.20%
30-9-2009	1	1.60%	93.80%
16-10-2009	1	1.60%	95.30%
12/11/2009	1	1.60%	96.90%
24-11-2009	1	1.60%	98.40%
8/12/2009	1	1.60%	100.00%
Total	64	100.00%	100.00%

Polio 2 vaccine copied from card	**Frequency**	**Percent**	**Cum Percent**
9/9/9999	4	6.30%	6.30%
24-11-2008	1	1.60%	7.80%
5/12/2008	1	1.60%	9.40%
1/1/2009	1	1.60%	10.90%
8/1/2009	1	1.60%	12.50%
3/2/2009	1	1.60%	14.10%

20-2-2009	1	1.60%	15.60
23-2-2009	1	1.60%	17.20%
27-2-2009	1	1.60%	18.80%
2/3/2009	1	1.60%	20.30
16-3-2009	1	1.60%	21.90
2/4/2009	1	1.60%	23.40%
3/4/2009	1	1.60%	25.00%
16-4-2009	1	1.60%	26.60
27-4-2009	1	1.60%	28.10
7/5/2009	2	3.10%	31.30%
12/5/2009	2	3.10%	34.40%
13-5-2009	1	1.60%	35.90
25-5-2009	1	1.60%	37.50
27-5-2009	1	1.60%	39.10%
1/6/2009	1	1.60%	40.60%
29-6-2009	1	1.60%	42.20
7/7/2009	1	1.60%	43.80
10/7/2009	1	1.60%	45.30%
14-7-2009	1	1.60%	46.90%
15-7-2009	1	1.60%	48.40
17-7-2009	1	1.60%	50.00
23-7-2009	1	1.60%	51.60%
29-7-2009	1	1.60%	53.10%
30-7-2009	1	1.60%	54.70
3/8/2009	1	1.60%	56.30
4/8/2009	1	1.60%	57.80%
7/8/2009	2	3.10%	60.90%
10/8/2009	1	1.60%	62.50
13-8-2009	1	1.60%	

			64.10%
16-8-2009	1	1.60%	65.60%
31-8-2009	1	1.60%	67.20%
3/9/2009	1	1.60%	68.80%
4/9/2009	2	3.10%	71.90%
11/9/2009	2	3.10%	75.00%
15-9-2009	1	1.60%	76.60%
16-9-2009	1	1.60%	78.10%
22-9-2009	1	1.60%	79.70%
23-9-2009	1	1.60%	81.30%
9/10/2009	1	1.60%	82.80%
15-10-2009	1	1.60%	84.40%
16-10-2009	2	3.10%	87.50%
19-10-2009	1	1.60%	89.10%
23-10-2009	1	1.60%	90.60%
30-10-2009	1	1.60%	92.20%
4/11/2009	1	1.60%	93.80%
17-11-2009	1	1.60%	95.30%
16-12-2009	1	1.60%	96.90%
7/1/2010	1	1.60%	98.40%
28-1-2010	1	1.60%	100.00%
Total	64	100.00%	100.00%

Polio 3 vaccine copied from card	**Frequency**	**Percent**	**Cum Percent**
9/9/9999	3	4.70%	4.70%
5/1/2009	1	1.60%	6.30%
19-1-2009	1	1.60%	7.80%
5/2/2009	1	1.60%	9.40%
6/3/2009	1	1.60%	10.90%
20-3-2009	1	1.60%	12.50%

26-3-2009	1	1.60%	14.10%
30-3-2009	1	1.60%	15.60%
2/4/2009	2	3.10%	18.80%
14-4-2009	1	1.60%	20.30%
25-4-2009	1	1.60%	21.90%
4/5/2009	1	1.60%	23.40%
8/5/2009	1	1.60%	25.00%
29-5-2009	1	1.60%	26.60%
11/6/2009	1	1.60%	28.10%
12/6/2009	1	1.60%	29.70%
15-6-2009	1	1.60%	31.30%
18-6-2009	1	1.60%	32.80%
19-6-2009	1	1.60%	34.40%
29-6-2009	2	3.10%	37.50%
8/7/2009	1	1.60%	39.10%
7/8/2009	1	1.60%	40.60%
12/8/2009	1	1.60%	42.20%
14-8-2009	2	3.10%	45.30%
15-8-2009	1	1.60%	46.90%
21-8-2009	1	1.60%	48.40%
27-8-2009	1	1.60%	50.00%
31-8-2009	1	1.60%	51.60%
3/9/2009	1	1.60%	53.10%
4/9/2009	1	1.60%	54.70%
7/9/2009	2	3.10%	57.80%
8/9/2009	1	1.60%	59.40%
10/9/2009	2	3.10%	62.50%
18-9-2009	1	1.60%	64.10%
25-9-2009	1	1.60%	65.60%
2/10/2009	1	1.60%	67.20%
5/10/2009	2	3.10%	70.30%
6/10/2009	1	1.60%	71.90%
16-10-2009	2	3.10%	75.00%
30-10-2009	1	1.60%	

			76.60%
6/11/2009	1	1.60%	78.10%
13-11-2009	1	1.60%	79.70%
16-11-2009	1	1.60%	81.30%
20-11-2009	1	1.60%	82.80%
23-11-2009	1	1.60%	84.40%
30-11-2009	1	1.60%	85.90%
2/12/2009	2	3.10%	89.10%
26-12-2009	1	1.60%	90.60%
5/1/2010	1	1.60%	92.20%
11/1/2010	1	1.60%	93.80%
12/1/2010	1	1.60%	95.30%
9/2/2010	1	1.60%	96.90%
16-3-2010	1	1.60%	98.40%
16-10-2010	1	1.60%	100.00%
Total	64	100.00%	100.00%

PENTA 1 vaccine copied from card	**Frequency**	**Percent**	**Cum Percent**
9/9/9999	3	4.70%	4.70%
24-10-2008	1	1.60%	6.30%
14-11-2008	1	1.60%	7.80%
30-11-2008	1	1.60%	9.40%
4/12/2008	1	1.60%	10.90%
29-12-2008	1	1.60%	12.50%
30-12-2008	1	1.60%	14.10%
19-1-2009	1	1.60%	15.60%
20-1-2009	1	1.60%	17.20%
22-1-2009	1	1.60%	18.80%
30-1-2009	1	1.60%	20.30%
13-2-2009	1	1.60%	21.90%
27-2-2009	2	3.10%	25.00%
3/3/2009	1	1.60%	26.60%
26-3-2009	1	1.60%	28.10%
1/4/2009	1	1.60%	29.70%

7/4/2009	1	1.60%	31.30%
9/4/2009	1	1.60%	32.80%
15-4-2009	1	1.60%	34.40%
22-4-2009	1	1.60%	35.90%
27-4-2009	1	1.60%	37.50%
28-4-2009	1	1.60%	39.10%
27-5-2009	1	1.60%	40.60%
29-5-2009	1	1.60%	42.20%
31-5-2009	1	1.60%	43.80%
3/6/2009	1	1.60%	45.30%
15-6-2009	1	1.60%	46.90%
19-6-2009	3	4.70%	51.60%
30-6-2009	1	1.60%	53.10%
2/7/2009	2	3.10%	56.30%
3/7/2009	1	1.60%	57.80%
8/7/2009	2	3.10%	60.90%
13-7-2009	1	1.60%	62.50%
16-7-2009	1	1.60%	64.10%
31-7-2009	2	3.10%	67.20%
3/8/2009	2	3.10%	70.30%
4/8/2009	1	1.60%	71.90%
11/8/2009	2	3.10%	75.00%
12/8/2009	1	1.60%	76.60%
14-8-2009	1	1.60%	78.10%
21-8-2009	1	1.60%	79.70%
26-8-2009	1	1.60%	81.30%
2/9/2009	1	1.60%	82.80%
9/9/2009	1	1.60%	84.40%
14-9-2009	1	1.60%	85.90%
16-9-2009	1	1.60%	87.50%
17-9-2009	1	1.60%	89.10%
18-9-2009	1	1.60%	90.60%
24-9-2009	1	1.60%	92.20%
30-9-2009	1	1.60%	

			93.80%
16-10-2009	1	1.60%	95.30%
12/11/2009	1	1.60%	96.90%
24-11-2009	1	1.60%	98.40%
8/12/2009	1	1.60%	100.00
Total	64	100.00%	100.00%

PENTA 2 vacciner copied from card	Frequency	Percent	Cum Percent
9/9/9999	4	6.30%	6.30%
24-11-2008	1	1.60%	7.80%
5/12/2008	1	1.60%	9.40%
1/1/2009	1	1.60%	10.90
8/1/2009	1	1.60%	12.50%
3/2/2009	1	1.60%	14.10%
20-2-2009	1	1.60%	15.60%
23-2-2009	1	1.60%	17.20
27-2-2009	1	1.60%	18.80%
2/3/2009	1	1.60%	20.30%
16-3-2009	1	1.60%	21.90%
2/4/2009	1	1.60%	23.40
3/4/2009	1	1.60%	25.00%
16-4-2009	1	1.60%	26.60%
27-4-2009	1	1.60%	28.10%
7/5/2009	2	3.10%	31.30
12/5/2009	2	3.10%	34.40%
13-5-2009	1	1.60%	35.90%
25-5-2009	1	1.60%	37.50%
27-5-2009	1	1.60%	39.10
1/6/2009	1	1.60%	40.60%
29-6-2009	1	1.60%	42.20%
7/7/2009	1	1.60%	43.80%
10/7/2009	1	1.60%	45.30
14-7-2009	1	1.60%	46.90%
15-7-2009	1	1.60%	48.40%

17-7-2009	1	1.60%	50.00%
23-7-2009	1	1.60%	51.60%
29-7-2009	1	1.60%	53.10%
30-7-2009	1	1.60%	54.70%
3/8/2009	1	1.60%	56.30%
4/8/2009	1	1.60%	57.80%
7/8/2009	2	3.10%	60.90%
10/8/2009	1	1.60%	62.50%
13-8-2009	1	1.60%	64.10%
16-8-2009	1	1.60%	65.60%
31-8-2009	1	1.60%	67.20%
3/9/2009	1	1.60%	68.80%
4/9/2009	2	3.10%	71.90%
11/9/2009	2	3.10%	75.00%
15-9-2009	1	1.60%	76.60%
16-9-2009	1	1.60%	78.10%
22-9-2009	1	1.60%	79.70%
23-9-2009	1	1.60%	81.30%
9/10/2009	1	1.60%	82.80%
15-10-2009	1	1.60%	84.40%
16-10-2009	2	3.10%	87.50%
19-10-2009	1	1.60%	89.10%
23-10-2009	1	1.60%	90.60%
30-10-2009	1	1.60%	92.20%
4/11/2009	1	1.60%	93.80%
17-11-2009	1	1.60%	95.30%
16-12-2009	1	1.60%	96.90%
7/1/2010	1	1.60%	98.40%
28-11-2010	1	1.60%	100.00%
Total	64	100.00%	100.00%

PENTA 3 vaccine copied from card	**Frequency**	**Percent**	**Cum Percent**
9/9/9999	3	4.70%	4.70%

5/1/2009	1	1.60%	6.30%
19-1-2009	1	1.60%	7.80%
5/2/2009	1	1.60%	9.40%
6/3/2009	1	1.60%	10.90%
20-3-2009	1	1.60%	12.50%
26-3-2009	1	1.60%	14.10%
30-3-2009	1	1.60%	15.60%
2/4/2009	2	3.10%	18.80%
14-4-2009	1	1.60%	20.30%
25-4-2009	1	1.60%	21.90%
4/5/2009	1	1.60%	23.40%
8/5/2009	1	1.60%	25.00%
29-5-2009	1	1.60%	26.60%
11/6/2009	1	1.60%	28.10%
12/6/2009	1	1.60%	29.70%
15-6-2009	1	1.60%	31.30%
18-6-2009	1	1.60%	32.80%
29-6-2009	2	3.10%	35.90%
8/7/2009	1	1.60%	37.50%
19-7-2009	1	1.60%	39.10%
7/8/2009	1	1.60%	40.60%
12/8/2009	1	1.60%	42.20%
14-8-2009	2	3.10%	45.30%
15-8-2009	1	1.60%	46.90%
21-8-2009	1	1.60%	48.40%
27-8-2009	1	1.60%	50.00%
31-8-2009	1	1.60%	51.60%
3/9/2009	1	1.60%	53.10%
4/9/2009	1	1.60%	

			54.70%	
7/9/2009	2	3.10%	57.80%	
8/9/2009	1	1.60%	59.40%	
10/9/2009	2	3.10%	62.50	
18-9-2009	1	1.60%	64.10	
25-9-2009	1	1.60%	65.60%	
2/10/2009	1	1.60%	67.20%	
5/10/2009	2	3.10%	70.30	
6/10/2009	1	1.60%	71.90	
16-10-2009	3	4.70%	76.60%	
30-10-2009	1	1.60%	78.10%	
6/11/2009	1	1.60%	79.70	
13-11-2009	1	1.60%	81.30	
16-11-2009	1	1.60%	82.80%	
20-11-2009	1	1.60%	84.40%	
23-11-2009	1	1.60%	85.90	
30-11-2009	1	1.60%	87.50	
2/12/2009	2	3.10%	90.60%	
26-12-2009	1	1.60%	92.20%	
5/1/2010	1	1.60%	93.80	
11/1/2010	1	1.60%	95.30	
12/1/2010	1	1.60%	96.90%	
9/2/2010	1	1.60%	98.40%	
16-3-2010	1	1.60%	100.00	
Total	64	100.00%	100.00	

Measles vaccine copied from card	**Frequency**	**Percent**	**Cum Percent**	

9/9/9999	9	14.10%	14.10%
16-5-2009	1	1.60%	15.60%
9/6/2009	1	1.60%	17.20%
23-6-2009	1	1.60%	18.80%
12/8/2009	1	1.60%	20.30%
18-8-2009	2	3.10%	23.40%
16-9-2009	1	1.60%	25.00%
30-9-2009	1	1.60%	26.60%
2/10/2009	1	1.60%	28.10%
29-10-2009	1	1.60%	29.70%
5/11/2009	1	1.60%	31.30%
6/11/2009	1	1.60%	32.80%
11/11/2009	2	3.10%	35.90%
13-11-2009	1	1.60%	37.50%
20-11-2009	1	1.60%	39.10%
23-11-2009	1	1.60%	40.60%
26-11-2009	1	1.60%	42.20%
2/12/2009	1	1.60%	43.80%
16-12-2009	1	1.60%	45.30%
30-12-2009	2	3.10%	48.40%
4/1/2010	1	1.60%	50.00%
5/1/2010	1	1.60%	51.60%
12/1/2010	1	1.60%	53.10%
1/2/2010	1	1.60%	54.70%
3/2/2010	1	1.60%	56.30%
10/2/2010	1	1.60%	57.80%
16-2-2010	1	1.60%	59.40%
17-2-2010	3	4.70%	64.10%
26-2-2010	1	1.60%	65.60%
1/3/2010	2	3.10%	68.80%
2/3/2010	1	1.60%	70.30%
8/3/2010	1	1.60%	71.90%
12/3/2010	1	1.60%	73.40%

15-3-2010	1	1.60%	75.00%	
19-3-2010	1	1.60%	76.60%	
26-3-2010	1	1.60%	78.10%	
31-3-2010	1	1.60%	79.70%	
9/4/2010	2	3.10%	82.80%	
26-4-2010	1	1.60%	84.40%	
28-4-2010	1	1.60%	85.90%	
30-4-2010	1	1.60%	87.50%	
7/5/2010	2	3.10%	90.60%	
14-5-2010	1	1.60%	92.20%	
19-5-2010	1	1.60%	93.80%	
25-5-2010	1	1.60%	95.30%	
20-6-2010	1	1.60%	96.90%	
9/7/2010	1	1.60%	98.40%	
30-7-2010	1	1.60%	100.00%	
Total	64	100.00%	100.00%	

Diarrhea

DEMOGRAPHIC DATA

Age Of The Child (In Months)	Frequency	Percent	Cum Percent	
1	1	1.00%	1.00%	
2	1	1.00%	2.10%	
3	3	3.10%	5.20%	
4	2	2.10%	7.30%	
5	2	2.10%	9.40%	
6	6	6.30%	15.60%	
7	7	7.30%	22.90%	
8	5	5.20%	28.10%	
9	3	3.10%	31.30%	
10	4	4.20%	35.40%	
11	4	4.20%	39.60%	
12	7	7.30%	46.90%	
13	4	4.20%		

			51.00%	
14	4	4.20%	55.20%	
15	6	6.30%	61.50%	
16	4	4.20%	65.60%	
17	8	8.30%	74.00%	
18	3	3.10%	77.10%	
19	5	5.20%	82.30%	
20	5	5.20%	87.50%	
21	3	3.10%	90.60%	
22	5	5.20%	95.80%	
23	4	4.20%	100.00%	
Total	96	100.00%	100.00%	

Sex Of Child	**Frequency**	**Percent**	**Cum Percent**	
Male	54	56.30%	56.30%	
Female	42	43.80%	100.00%	
Total	96	100.00%	100.00%	

CONTROL OF DIARRHEA

Q4 If EBF, When (name of child) was sick, was s/he offered more breastmilk than usual, about the same amount, or less than usual?	**Frequency**	**Percent**	**Cum Percent**	
Less than usual	29	30.20%	30.20%	
Same amount	11	11.50%	41.70%	
More than usual	56	58.30%	100.00%	
Total	96	100.00%	100.00%	

Q5 When (NAME) had diarrhea, was he/she offered less than usual to drink, about the same amount, or more than usual to drink?	**Frequency**	**Percent**	**Cum Percent**	
Less than usual	18	18.80%	18.80%	
Same amount	13	13.50%	32.30%	
More than usual	65	67.70%	100.00%	
Total	96	100.00%	100.00%	

Q6 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?	Frequency	Percent	Cum Percent
A	55	57.30%	57.30%
B	8	8.30%	65.60%
C	33	34.40%	100.00%
Total	96	100.00%	100.00%

Q6 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?	Frequency	Percent	Cum Percent
Lesss	55	57.30%	57.30%
Same or More	41	42.70%	100.00%
Total	96	100.00%	100.00%

Q7A ORS packet	Frequency	Percent	Cum Percent
Yes	69	71.90%	71.90%
No	27	28.10%	100.00%
Total	96	100.00%	100.00%

Q7B Sugar and salt water	Frequency	Percent	Cum Percent
Yes	12	12.50%	12.50%
No	84	87.50%	100.00%
Total	96	100.00%	100.00%

Q7C ORT	Frequency	Percent	Cum Percent
Yes	18	18.80%	18.80%
No	78	81.30%	100.00%
Total	96	100.00%	100.00%

Q7D Medecine	Frequency	Percent	Cum Percent

Medicament traditionnel	1	2.40%	2.40%	
A lot of water	1	2.40%	4.80%	
Any medecine	2	4.80%	9.50%	
Cotrimo, prometazin	1	2.40%	11.90%	
Cootrim	1	2.40%	14.30%	
Water	1	2.40%	16.70%	
Purge	1	2.40%	19.00%	
Legums	1	2.40%	21.40%	
Mebendazol	2	4.80%	26.20%	
Mebendazol, cotrimo	1	2.40%	28.60%	
Mebendazol, Multivitamin	1	2.40%	31.00%	
Metronidazol	1	2.40%	33.30%	
No medecine	4	9.50%	42.90%	
ORS	1	2.40%	45.20%	
Paracetamol sirop	1	2.40%	47.60%	
Paracetamol, bactrim, metronidazol	1	2.40%	50.00%	
Paracetamol, fer, amoxy	1	2.40%	52.40%	
Paracetamol, Mebendazol	1	2.40%	54.80%	
Paracetamol,albendazol	1	2.40%	57.10%	
Peni, Vermox, Paracetamol	1	2.40%	59.50%	
IV fluids	1	2.40%	61.90%	
IV fluids	1	2.40%	64.30%	
tablet	2	4.80%	69.00%	
Tablets gainst fever	1	2.40%	71.40%	
tablets	4	9.50%	81.00%	
Tablets (unknown)	1	2.40%	83.30%	
Tablets (unknwon)	1	2.40%	85.70%	
unknown	1	2.40%	88.10%	
Unknown tablets	2	4.80%	92.90%	
Unknown tablets of cough	1	2.40%	95.20%	
Vermox	1	2.40%	97.60%	
Water	1	2.40%	100.00%	
Total	42	100.00%	100.00%	

Q7. Sick children who received oral rehydration solution and/or recommended home fluids	Frequency	Percent	Cum Percent
No	21	21.90%	21.90%
Yes	75	78.10%	100.00%
Total	96	100.00%	100.00%

Malaria (Fever)

DEMOGRAPHIC DATA

Age of Child in months	Frequency	Percent	Cum Percent
1	2	2.10%	2.10%
3	5	5.20%	7.30%
4	2	2.10%	9.40%
5	5	5.20%	14.60%
6	4	4.20%	18.80%
7	5	5.20%	24.00%
8	6	6.30%	30.20%
9	4	4.20%	34.40%
10	5	5.20%	39.60%
11	3	3.10%	42.70%
12	8	8.30%	51.00%
13	3	3.10%	54.20%
14	5	5.20%	59.40%
15	7	7.30%	66.70%
16	6	6.30%	72.90%
17	7	7.30%	80.20%
18	2	2.10%	82.30%
19	4	4.20%	86.50%
20	2	2.10%	88.50%
21	4	4.20%	92.70%
22	5	5.20%	97.90%
23	2	2.10%	100.00%
Total	96	100.00%	100.00%

FEVER (SUSPECTED MALARIA)

Q4.Did you seek advice or treatment for (NAME'S) fever?	Frequency	Percent	Cum Percent
No	10	10.40%	10.40%

Yes	86	89.60%	100.00%
Total	96	100.00%	100.00%

Q5Where did you first go for advice or treatment?	**Frequency**	**Percent**	**Cum Percent**
No where	2	2.10%	2.10%
Hospital	9	9.40%	11.50%
Health Center	11	11.50%	22.90%
Health Post	72	75.00%	97.90%
Don't Know	2	2.10%	100.00%
Total	96	100.00%	100.00%

Q6 How long after you noticed (NAME'S) fever did you seek treatment from that person/place?	**Frequency**	**Percent**	**Cum Percent**
Same day	26	27.10%	27.10%
Next day	47	49.00%	76.00%
Two days	8	8.30%	84.40%
Three or more days	7	7.30%	91.70%
No	4	4.20%	95.80%
Don't know	4	4.20%	100.00%
Total	96	100.00%	100.00%

Q7 Was (NAME) treated with any medicine(s)?	**Frequency**	**Percent**	**Cum Percent**
No	13	13.50%	13.50%
Yes	82	85.40%	99.00%
N/A	1	1.00%	100.00%
Total	96	100.00%	100.00%

Q8. Which medecines were given to (Name) for his/her fever?

A Amodiaquine + Artesunate	**Frequency**	**Percent**	**Cum Percent**
Same day	19	19.80%	19.80%
Next day after feverTwo days after fever	24	25.00%	44.80%
Two days after fever	3	3.10%	47.90%
Thre or more days after fever	1	1.00%	49.00%
No	49	51.00%	100.00%

Total	96	100.00%	100.00%

B Quinine	Frequency	Percent	Cum Percent
Same day	2	2.10%	2.10%
Next day after feverTwo days after fever	3	3.10%	5.20%
No	91	94.80%	100.00%
Total	96	100.00%	100.00%

C Paracetamol	Frequency	Percent	Cum Percent
Same day	31	32.30%	32.30%
Next day after feverTwo days after fever	27	28.10%	60.40%
Two days after fever	5	5.20%	65.60%
Thre or more days after fever	2	2.10%	67.70%
No	30	31.30%	99.00%
Don't know	1	1.00%	100.00%
Total	96	100.00%	100.00%

Children treated with an effective anti-malarial (ACT or Quinine) drug within 24 hours	Frequency	Percent
No	49	51.04%
Yes	47	48.96%
Total	96	100.00%

Pneumonia

DEMOGRAPHIC DATA

Age of Child	Frequency	Percent	Cum Percent
1	2	2.10%	2.10%
2	1	1.00%	3.10%
3	6	6.30%	9.40%
4	4	4.20%	13.50%
5	8	8.30%	21.90%
6	2	2.10%	24.00%

7	6	6.30%	30.20%	
8	5	5.20%	35.40%	
9	3	3.10%	38.50%	
10	8	8.30%	46.90%	
11	4	4.20%	51.00%	
12	2	2.10%	53.10%	
13	3	3.10%	56.30%	
14	4	4.20%	60.40%	
15	9	9.40%	69.80%	
16	3	3.10%	72.90%	
17	6	6.30%	79.20%	
18	1	1.00%	80.20%	
19	6	6.30%	86.50%	
20	4	4.20%	90.60%	
21	3	3.10%	93.80%	
22	3	3.10%	96.90%	
23	3	3.10%	100.00%	
Total	96	100.00%	100.00%	

Sexe Child	**Frequency**	**Percent**	**Cum Percent**
Male	48	50.00%	50.00%
Female	48	50.00%	100.00%
Total	96	100.00%	100.00%

PNEUMONIA TREATMENT

Q4 When (name of child) had an illness with a cough, did s/he have trouble breathing or breathe faster than usual?	**Frequency**	**Percent**	**Cum Percent**
Yes	93	96.90%	96.90%
No	3	3.10%	100.00%
Total	96	100.00%	100.00%

Q5 Did you seek advice or treatment for the cough/fast breathing?	**Frequency**	**Percent**	**Cum Percent**

A	81	84.40%	84.40%	
B	15	15.60%	100.00%	
Total	96	100.00%	100.00%	

Q6. Who gave you advice or treatment for the cough/fast breathing?

Q6A Doctor	Frequency	Percent	Cum Percent	
No	96	100.00%	100.00%	
Total	96	100.00%	100.00%	

Q6b Nurse	Frequency	Percent	Cum Percent	
Yes	79	82.30%	82.30%	
No	17	17.70%	100.00%	
Total	96	100.00%	100.00%	

Q6C Community Health Worker	Frequency	Percent	Cum Percent	
No	96	100.00%	100.00%	
Total	96	100.00%	100.00%	

Q6D Other	Frequency	Percent	Cum Percent	
My self, no one else	1	33.30%	33.30%	
My neighbor	1	33.30%	66.70%	
Volunteer	1	33.30%	100.00%	
Total	3	100.00%	100.00%	

% of children taken to an appropriate health provider	Frequency	Percent	Cum Percent	
No	17	17.70%	17.70%	
Yes	79	82.30%	100.00%	
Total	96	100.00%	100.00%	

REFERENCES

[i] www.uneca.org/aisi/nici/country_profiles/burundi/burab.htm
[ii] http://www.unicef.org/infobycountry/burundi_statistics.html
[iii] Republique du Burundi/Ministere de la Santé Publique. *Plan National de Developpement Sanitaire, 2006-2010.* Bujumbura, November 2005 [hereafter: **PNDS 2005**]
[iv] 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**]
[v] U.S. Census Bureau International Database
[vi] Kibuye Health District, Annual Report 2009

[vii] Kibuye CSP 2007, Detailed Implementation Plan
[viii] Kibuye Heatk District, Annual Report 2009
[ix] **KPC2000 SURVEY FOR PVO CHILD SURVIVAL REVISED BY CHILD SURVIVAL TECHNICAL SUPPORT PROJECT (CSTS) AND CORE M&E WORKING GROUP**
[x] CORE Group, September 2008. Protocol for Parallel Sampling: Using Lot Quality Assurance Sampling to Collect Rapid CATCH Information.
[xi] http://www.unicef.org/infobycountry/burundi_statistics.html
[xii] Even if the question 11 was —before the pregnancy"; we included also TT for the previous pregnancy , we considered the question 10 as a sub question to question 11. It was clarified during the surveyor training but we missed to bring such correction to the last version of the questionnaire. Therefore 86.50 % as highlighted in red in the above table is related to the indicator: —% mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child" . The question should be " Before the birth with (Name), how many times did you receive a tetanus injection?"

[xiii] Even if the question 11 was —before the pregnancy"; we included also TT for the previous pregnancy , we considered the question 10 as a sub question to question 11. It was clarified during the surveyor training but we missed to bring such correction to the last version of the questionnaire. Therefore 86.50 % as highlighted in red in the above table is related to the indicator: —% mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child" . The question should be " Before the birth with (Name), how many times did you receive a tetanus injection?"

[xiv] Note that one child's vaccination card stated that the child had received PENTA 1 and PENTA 3, but PENTA 2 was not noted. Thus, the child is considered to have received PENTA 2.

Annex 7: 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	Grantee-developed Cadre	Volunteer		BCC messages Data collection Management of danger signs for— • fever • malnutrition • diarrhea
Kibuye District	Health Promoters	Grantee-developed cadre	Paid	15	Supervision Data collection/analysis Technical and counseling skills. Re: • fever • malnutrition • diarrhea
Kibuye District	CSP supervisors	Grantee-developed cadre	Paid	4	Supervision Data collection/analysis Technical and counseling skills. Re: • fever • malnutrition • diarrhea

Annex 8: Evaluation Team Members and Their Titles

Paulette A. Chaponniere, PhD	Consultant
Melene Kabadege	World Relief Regional Technical Advisor
Francois Niyitegeka	CSP Manager
Euphrasie Kabura	MOH District Supervisor, HIS
Helene Lukinda	MOH Provincial Manager
Melance Havyarimana	MOH District Supervisor, Health Centers
Melanie Morrow, MPH	Director of MCH programs, World Relief/USA
Emile Niyungeko	CSP Training Officer
Jean-Baptiste Sibomana, MA	CSP Monitoring & Evaluation Officer

Annex 9: Evaluation Assessment Methodology

1. Quantitative Data: WR and MOH personnel conducted a mid-term KPC-2000 survey to determine progress to date. As the baseline survey had been translated into Kirundi, the same questions were used for this one. The LQAS approach was used to determine 24 households per commune for a total of 96 families randomly selected. Promoters collected data in pairs and then the WR district supervisor and project M&E supervisor reviewed and entered data. Later when WR regional staff analyzed the data, they discovered that some sections had very high levels, for example, 100% of the mothers interviewed had immunization records for their children. In reviewing the data collection approach, WR regional staff found that some of the instructions had been incorrectly understood by the promoters, i.e., that when asking to see immunization records, they needed to continue collecting data until they had seen 96 cards. Thus, a repeat survey was implemented in order to address these issues.

2. Qualitative Data: Qualitative data was obtained through individual interviews, focus groups and direct field observations. Key questions were elaborated in French with the evaluation team for each type of interview or focus group. One limitation to the evaluation process was that these questions were not then translated into Kirundi so that all questions were being asked in the same way. This is not as key a limitation as it would have been for the quantitative data as the questions were addressing general ideas. The team determined that the sample size at certain levels would be complete while at other levels would be random. At the district level, all the MOH field staff were interviewed as well as the chief medical officer at the Free Methodist hospital. All MOH TPS and WR district supervisors were interviewed. As the district of Kibuye only has 3 health centers, all three were included in the sample for interviewing the head nurse as well as the focus group of mothers at the immunization clinics. Then a random sample of 3 WR promoters of the 8 was selected.

The ME team was divided into 3 smaller teams so that a member of MOH district or provincial staff was in each as well as a member of WR district and central staff. As the consultant did not speak Kirundi, a staff member from the WR Burundi office not involved in the health programs graciously translated for her. After completing each interview set or focus group, the teams then debriefed and summarized the results. The summary was further analyzed for common themes, and then the team proposed recommendations which were grouped into categories. Key results and recommendations were then shared with the Provincial Medical Director, key MOH staff in Burundi, USAID and other NGOs who are also involved in child survival projects-.

Questions for interviews and focus group discussions were drawn from the following:

KPC Survey 2000

Please refer to Baseline Document for questions translated into Kirundi.

Questions for Interviews and Focus Groups

<u>Health Center</u>

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?*
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. *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. 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?*
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 suggestion*:

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?*

WR Supervisors and Public Health Technicians (TPS) from MOH

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?*

WR Promoters and CHW/MOH

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?

NOTE: Check the scales to see if they are correctly calibrated. Do the promoters and CHWs know how to do this?

Annex 10: List of Persons Interviewed and Contacted during the Mid-Term Evaluation

World Relief/Burundi

Josephat Ngaira, Country Director
Thatien Munayneza, Financial Officer
Virginie Niyizigama, Human Resources
Acher Niyonizigiye, Translator
Emile Niyungeko, CSP Training Officer
Jean-Baptiste Sibomana, CSP Monitoring & Evaluation Officer

World Relief/Kibuye

Supervisors: Gerturde Nyosaba, Agnes, Lucie, Annonciate
Health Promoters:
Buraza Commune: Louise Kigeme, Joselyne Nimpaye, Josee Zepherine
Bukirasazi Commune: Spes Mataratara, Donate Nisiboma
Makebuko Commune: Benigne Nziranisha
Haba Commune: Aime Ndayikundo, Josiane Umutesi, Paulette Nzobonimpa, Alice Bigiridavyi, Benigne Nitsumutima

USAID/ Burundi

Jim Anderson, Country Director
Donatien Ntakarutimana, Program Development Specialist, Health

MOH/Bujumbura

M.D., DG
Nigimpapye, Vitale, MD, DGSP, Advisor to Health Minister *
Niyungeko, Jacqueline, DSPS/MSP *
Bazobanza, P. Claver, MD, PCIME/MSP *
Ryumeko, Evelyne, MD, Nutrition Unit/ MSP (Promianut)*
Ndikumna, Desire, GAVI/RSP, MSP* (* = attended debriefing meeting)

MOH/Gitega

Provincial Health Officer
Lukinda, Helene, Provincial Manager

MOH/Kibuye District

Idumbo, Foster, Med/GYN at Free Methodist Hospital
Havyarimana, Melance, District Supervisor, Health Centers
Hakizimana, Abraham, District Supervisor, Health Programs
Kabura, Euphrasie, District Supervisor, HIS
Hitimana, Gerard, Head nurse @ Buhinda Health Center
Ndereyimana, Jacinthe, Head nurse @ Buhoro Health Center
Halelimana, Gordien, Head nurse @ Gisikara Health Center
Nahayo, Nestor, Nahayo TPs
Badyatuyago, Deos, Makebuko TPs
Iradukunda, Eric, Itaba TPs
Shamaje, Delphin, Buraza TPs

Focus Groups

CHWs @ Buhinda: Ntahobari, D., Odama, F., Bukuru, R., Nsabimana, E.

CHWs @ Buhoro: Simbatohana, B., Kagoma, S., Ntahomvukiye, L., Nicosenzi, M., Nzohabonimana, S.

CHWs @ Gisikara: Sinigirira, M (also volunteer), Ntahimpera, A., Ntahisaniye, M (also volunteer), Ntakarutimana, J., Nkenyereye, A., Nbeshimiswe, O., Buyora, V. (also volunteer)

Pastors' Care Group @ Buhinda: Venase (Methodist), Gloriose (Methodist), Janvier (Catholic), Thaddee (Catholic), Samuel (FECABU), Claver (Catholic), Barthelemy (Catholic), Samuel (Free Methodist)

Pastors' Care Group @ Gisikara: Leonidas (Methodist), Damien (Catholic), Leonidas (Catholic), Cassien (Methodist), Paul (Methodist), Pontien (Methodist)

Pastors' Group @ Buhoro: Ezecheil (FECABU), Emmanuel (Catholic), Ildponse (Catholic), Raphael (FECABU), Concilie (SILOE), Mathieu (SILOE), Andre (Catholic), Leonidas (Catholic), Marie (Pentecost), Caritas (SILOE)

COSA @ Gisikara: Nisago, J., Nkundikije, E., Nsabimana, P., Habonimana, R., Sinizeye, E., Ntacoyampaye, E., Ntakarutimana, L., Sibomana, F., Ikorukwishaka, A.

COSA @ Buhinda: Kabanamwo, C. (president), Murarana, G., Mugozi, M., Ntauryamana, S., Ntibazonkizo, J., Nahimana, S., Gahungu, R., Kabwa, L., Manirakiza, C., Nzeyimana, D. Also present were 2 CHWs and 5 TBAs

COSA @ Buhoro: Bigirimana, J. (President), Kasa, S., Bingiye, R., Nditamana, D., Singirankabo, R.

Nyumbakumi (NK) @ Buhoro: Nyandusi, G., Cimpaye, G., Nyandusi, T., Habonimana, D., Bukenenishano, P., Mpfekurera, G., Moundane, N., Niyunkuru, T., Misigaro., D

Volunteers/WR @ Buhoro: Nshimirimana, R., Habonimana, L., Barayandema, L., Bulumi, F., Nzeyimana, F., Sibomana, P., Ntirampeba, F., Manilaloza, A., Minyurano, C., Gakobwa, C., Ngenrakumana, E.

VolunteersWR @ Gisikara: Niyonzima, S., Kamikazi, J., Htngimana, F., Nzokirantevye, A., Amerusenge, N, Gukira., An., Ninani, S., Mbonima, C., Ndorimana, M., Giza, R., Hicuburundi, S., Mvuyekure, B., Kabura, V., Nicayenzi, D., Bigendako, Fa., Hakizimana, D.

Annex 11: Project Data Form

Child Survival and Health Grants Program Project Summary

Oct-28-2011

World Relief Corporation
(Burundi)

General Project Information

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

Field Program Manager

Name:	Francois Niyitegeka
Address:	
	Burundi
Phone:	
Fax:	
E-mail:	niyifrancois@yahoo.fr
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

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 stengthen 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 peopel 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 intergration with the Ministry of Heath (MOH) to introduce the C-IMCI in Burundi; modeling intenstive 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 finacing; and building civil society through mobilization for child health.

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

Strategies

Social and Behavioral Change Strategies:	Group interventions Interpersonal Communication
Health Systems Strengthening:	Task Shifting Developing/Helping to develop clinical protocols, procedures, case management guidelines
Strategies for Enabling Environment:	Advocacy for policy change or resource mobilization
Tools/Methodologies:	LQAS

Capacity Building

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

Interventions & Components

Immunizations (10%) - Vitamin A - Surveillance - New Vaccines - Mobilization - Measles Campaigns	IMCI Integration	CHW Training HF Training
Nutrition (25%) - ENA - Gardens - Complementary Feeding from 6 months - Hearth - Continuous BF up to 24 months - Growth Monitoring - Maternal Nutrition	IMCI Integration	CHW Training HF Training
Vitamin A (5%) - Supplementation - Integrated with EPI - Gardens	IMCI Integration	CHW Training HF Training
Micronutrients		CHW Training HF Training
Pneumonia Case Management	IMCI Integration	CHW Training HF Training
Control of Diarrheal Diseases (20%) - Hand Washing - ORS/Home Fluids - Feeding/Breastfeeding - Care Seeking	IMCI Integration	CHW Training HF Training

- Case Management/Counseling
- Zinc

Malaria (30%) - Access to providers and drugs - ITN (Bednets) - Care Seeking, Recog., Compliance	IMCI Integration	CHW Training HF Training
Maternal & Newborn Care	IMCI Integration	CHW Training HF Training
Healthy Timing/Spacing of Pregnancy	IMCI Integration	CHW Training HF Training
Breastfeeding (10%) - Promote Exclusive BF to 6 Months - Peer support	IMCI Integration	CHW Training HF Training
HIV/AIDS		CHW Training HF Training
Family Planning	IMCI Integration	CHW Training HF Training
Tuberculosis	IMCI Integration	CHW Training HF Training

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		0
Male	2011		0
Female	2012	2850	
Male	2012	550	
Female	2013	0	
Male	2013	0	
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		0
Male	2011		0
Female	2012	2850	
Male	2012	550	
Female	2013	0	
Male	2013	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		0
Male	2011		0
Female	2012	2850	
Male	2012	550	
Female	2013	0	
Male	2013	0	

Locations & Sub-Areas

Total Population: 198,516

Target Beneficiaries

	Burundi - WRC - FY2007
Children 0-59 months	36,368
Women 15-49 years	42,284
Beneficiaries Total	78,652

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	**100**	**136**	**73.5%**	**16.2**

received DTP3 according to the vaccination card or mother's recall by the time of the survey				
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	**24**	**300**	**8.0%**	**4.4**

effective) the previous 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)	**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**

Rapid Catch Indicators: Mid-term

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	**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	**79**	**96**	**82.3%**	**7.6**

weeks who were taken to an appropriate health provider				
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%**[3]	**6.0**

Rapid Catch Indicators: Final Evaluation

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

[3] Please note this error on the electronic data form. This indicator was not measured.

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.

Annex 12: Special Reports: none

Annex 13: Major themes from Qualitative Data

Major Themes from Focus Groups and Interviews

Ways the project has improved health

a. Increased knowledge:

- danger signs when a child has diarrhea
- how to prevent diarrhea
- the importance of washing hands
- nutrition for children and how to help them catch-up lost weight
- body and clothes cleanliness, especially for children
- danger signs (fever and blood in stools)

b. Behavior changes:

- increase in immunizations
- less cases of malaria
- births at health center
- have a dish rack;
- families now go to the health center for care rather than to the traditional healer
- improved nutrition with more vegetables, thickened soups and fluids for children

Home visits by CG volunteers: Most of the women at the health centers knew that there were CG volunteers (though there was some confusion between CG volunteer and health promoter). Several had had a visit from a volunteer but visits were sporadic. Visits were more regular when the CG promoter lived here them.

Why do you think the care group volunteers come to visit you?

a. There is not enough health personnel to come on home visits, so the CG volunteers are needed
b. They come to teach us your messages
c. They encourage us to go to the health center
d. They come so that we have better health behaviors
e. They come to remind us about immunizations
f. They come to see if we have put into practice the new behaviors

Project Design

- Care Group strategy: able to meet health indicators; we are able to reach more people
- Data collection and analysis: There used to be 2 data collection systems, one for MOH and another for CSP. We now have one system and analyze monthly data together (health center and CSP staff)

Motivation to attend CG meetings:

- We learn new health ideas.
- We were elected so need to fulfill our responsibilities.
- We learn things to help our children be healthier.

Barriers to attendance:

- There is no financial incentive, not —soap". There are other family responsibilities that we need to take care of, for example, illness or deaths. The volunteers' husbands discourage them from attending.
- There are differences in remuneration, for example, CHWs are paid by MOH when they come to meetings, but CG volunteers are not. Other projects pay their volunteers

Health education materials available

- One health centers had five health flipcharts in poor condition. Other centers had one.
- Promoters and CG volunteers have the same booklets.

What else has this project added to the overall health of your family?

- Increase in positive relationships with neighbors: help each other out when in need and solidarity, more friendships and less hate; get to know each other better.
- Cooperation with the Batwa and other displaced people; new relationships

Observations during home visits

- Hand washing stations: Consistently none found in homes. Some women showed the shower area as the place they wash their hands. Some soap kept inside home.
- Latrines: one home in three had an adequate latrine (sealed tree limbs and hole cover). Unsure as to depth of latrine pit.
- Immunization cards: Majority of had the vaccination records (cards, slips of paper) for their children under 1 (11 of 15); two families had the vaccination cards for all their children under five.
- Some of the religious leaders include health messages during services.

What are this project's strengths?

- CG volunteers are able to reach all the population: teach them health messages; give people information about common childhood diseases; encourage them to come for immunizations; they are more confident in speaking in public
- There are no ethnic or religious discriminations
- Health is the focus
- There have been positive changes in behaviors and attitudes. People thought that change was not possible, but now see that it is.

- Cooperation between CSP staff and CHW and COSA, team work
- Collaboration with partners
- Work alongside the community

What are this project's weaknesses?

- CG volunteers are not modeling the healthy behaviors that they are teaching.
- The cooperatives created by the CG volunteers are weak.
- Interim supervisors have not been trained in supervision techniques but only in how to write reports, and so need additional training.
- Salaries are too low
- Attitudes of dependency: "the project gives something to the volunteers, but not to the families involved in the activities"

Families refuse to have CG volunteers to do home visits because they believe that they are being paid and so are jealous, or, because people are suspicious wondering why they are coming.

What changes could you recommend for improving this project?

Community outreach: Give "soap" to volunteers, CHWs, families and children involved in PD/Hearth

Health education

Materials: increase the pictures in the IEC booklets; create flash cards to use during home visits and community meetings

Training: Review the health messages with the volunteers who are absent. Teach us how to use different communication methods (dialog, conundrums, and group discussions

Add other messages: family planning, tuberculosis and other diseases

Provide a carrying case to hold the health education materials

Partnerships: Sign performance contracts with the MOH or include in the budget reimbursement costs for MOH personnel involved in project activities. Provide gas to TPS so that they can increase their outreach activities (currently they need to pay for their own gas)

Indicators: Create strategies to follow-up on no-shows and missed appointments

Project design: Train the health promoters in more content; provide them with additional training materials; add more men to the CG; review salary structure and increase current salaries especially for the promoters; give CSP personnel a T-shirt to help community identify who they are. Strengthen the cooperatives formed by CG volunteers by providing them with seeds, for example

Annex 14: Recommendations by Category

Program Activities

1. Thank all volunteers, partners, funding agencies, MOH personnel at district, provincial and national levels.
2. Continue EPI info campaign
3. Increase support for the construction of latrines
4. Build on the strong points of the current project.
5. Strengthen the transmission of behavior change messages
6. Encourage volunteers to become role models and thus demonstrate behavior changes.
7. As a means to motivating volunteers instead of paying them, strengthen their associations by providing them with seeds or livestock to increase household income.
8. Explore other options other than boiling for making water potable, and then add these options to the health messages.
9. Encourage the creation of home hand-washing stations, similar to a Tippy Tap or jerry can.
10. Instead of modifying the current booklets given to the volunteers, create other visual aids to use during the training of volunteers and home visits.
11. Provide a carrying case for the booklets and visual aids. Note: The training line item was underestimated when the budget was created.
12. Strengthen the implementation of home visits by encouraging volunteers to become personally involved in spreading the health messages. After teaching a new health message, health promoters at the next meeting with volunteers could discuss how well the other women responded to the new idea; discuss what to do when barriers have occurred. This should also be part of the supervision approaches. Note: Volunteers favor training rather than spreading the message
13. Continue to ask volunteers to do home visits twice during the month, even though the monitoring criterion is once a month.
14. Strongly plead for social change by finding local solutions to decrease dependence on external resources
15. In order to motivate Care Group volunteers, help them create their own cooperative, for example, micro-financing or saving plans that have been used by WR elsewhere in Burundi. Plan to expand these initiatives to include CSP beneficiaries, so that the focus is on the group rather than on the individual obtaining resources (see # 18).
16. Set up a meeting schedule for the Care Groups at a predetermined location. CG volunteers have gone to meetings planned by other programs instead of coming to

CG meetings, in part because they will receive donations there but also because there was no set schedule.

17. As there has been some resistance to the concept of volunteerism, schedule community meetings to discuss this concept. (see # 19)
18. Budget additional funds for the next project evaluation to cover transportation expenses for each group involved in the process (ex., pastors' groups, volunteer groups) and also include refreshments.
19. Purchase T-shirts with CSP logo or other identification and book bags for the Care Group volunteers.
20. Plan to send members from more successful Care Groups to encourage Care Groups where results have been weaker. This will give CG volunteers an opportunity to visit other sites.

Human Resources

21. Review the current WR salary structure to align it with other NGOs, in particular the salaries for the health promoters
22. Pastor Care Groups: When pastors are re-assigned to a different congregation, replace him/her with the new pastor from the first congregation instead of having the former pastor travel a long distance to continue to participate in the group.
23. Continue to recruit generalists for the position of health promoter because their background includes more social aspects and thus have better success in mobilizing communities to implement change than do nurses.
24. Recruit health promoters who live locally. Select future promoters from among CG volunteers and train them.
25. Hire someone who has training and material development expertise to provide technical assistance to WR programs through the Baltimore office.

Partnerships

26. Explain to MOH Health District personnel the CSP project vision. It is focused on public health and not on curative services as the MOH personnel would like to have the services of the health promoters who are nurses in providing care. The latter often have less interest in public health.
27. As there is only one community health indicator, latrines, used for the evaluation of personnel performance in the national health system, add access to potable water as an indicator. This will require budgetary adjustments at the national level.
28. Add to the latrine indicator not only the number of latrines built but also their quality, for example, whether the hole was dug at the correct depth, whether there is a cement slab on it.
29. Negotiate with the public health technicians to also include the quality component when they evaluate latrines. Involve cooperatives/community associations as well

as local authorities to help the poorest families purchase supplies needed for building their latrines.

30. Integrate the CHWs into the Care Groups.
31. Strengthen the partnership with the TPS and the health center head nurses: integrate planning, joint evaluation and analysis of data.
32. Discourage the dependency attitude as a way to decrease resistance des beneficiaries and spouses:
    a. Create messages which could be given during church services or other religious events
    b. Include local authorities so that they can also speak with family members
    c. Explore with other NGOs what common strategies could be used to move beneficiaries from a dependency mode to a development one. Currently, Burundi is no longer in a post-conflict phase, but in a development phase.
33. Meet with district administrators to request that a day be designated as "Child Survival Day" or to include CSP volunteers in other district-wide events so that the results of the project can be shared with a wider audience. During these public events, distribute items, such as jerry cans, to the volunteers.
34. Clarify with MOH whether community-based distribution of ORS packets will be implemented. Encourage MOH to include community-based distribution though the Care Groups.
35. Include supervision as a performance indicator for PHTs (see above).

Training

36. Train the CHWs and village leaders (NK) on the same content given to WR Care Group volunteers
37. Training (3/5/15/21/4/25):
    a. Review facilitation methods, group dynamics as well as adult learning principles with the volunteers, for "we train the way we have been trained".
    b. Plan and implement in-service training for WR staff on child survival
    c. Implement a TOT (training of trainers) for WR trainers as part of the in-service program
    d. Provide health education resources for the health promoters that provide more content, such as "Where there is No Doctor". Currently, WR health promoters only have access to the same resources as the volunteers.
    e. Create lesson plans and handouts that the health promoters could use when they train volunteers.
    f. Train the health promoters in additional health education content.
38. Increase the health content and skills in the promoter training program, being careful not to train them as nurses. This additional content will need to be included in the supervision grid.

39. Train the PD/Hearth volunteers to monitor nutrition during home visits.
40. Select other sites for training programs rather than just using Kibuye.
41. Train CSP staff in family planning/reproductive health.

Supervision

42. Create strategies for follow-up for prenatal care and EPI missing cases
43. Strengthen the supervision of volunteers both in how they implement home visits as well as in data collection.
44. Identify and train assistant supervisors
45. Implement in-service training for current supervisors, for example, the use of the supervision grids which were developed in April 2010; supervision strategies
46. Create supervision grids which are based on the training health promoters have received
47. When a health promoter needs to be absent for maternity leave or has resigned from WR, divide up the Care Groups she supervised among the other health promoters until she returns from maternity leave or someone else is hired. This will insure that the Care Groups continue to receive supervision and training.
48. Select effective management indicators which can be used internally at WR/Burundi for evaluation purposes.
49. Clarify the scope of the performance contract under which the TPS work in order to avoid paying them twice for supervisory activities. (Currently, they will often park their motorbikes because they have to provide their own gas). Organize supervision visits jointly for field from the Child Survival Project and the TPS.
50. Purchase additional motorbikes so that each CSP promoter has one. There has been an increase in gas usage because they need to share them.
51. Purchase or obtain scales for each promoter to use in PD/Hearth home visits and follow-up.
52. Purchase bikes for each Care Group leader.
53. Increase field supervision visits of WR district and central office to Care Group sites. This will support promoters and volunteers as they can then affirm ~~–~~What we are telling you does not come from us."

Data Collection

54. Report evaluation results to the village health committees and also during community meetings. +
55. Reinforce the integration of data collection during supervision visits.
56. Create a separate data category for home birth deliveries.
57. Integrate the two community systems: community health workers and WR volunteers.
58. Analyze the quarterly data together with WR and MOH district personnel.

59. Create one HIS system for all health data so that HIS data for specific programs such as HIV/AIDS, TB, Malaria are included in the district monitoring. Currently this data goes directly to the central level.
60. Schedule CSP data collection for similar time periods as those used by health facilities as a means to verify accuracy. Example, collect data bi-monthly and compile it monthly.
61. Use collected data to help volunteers make decisions and choose strategies to promote behavior change among their neighbors (idea of finding ~~"e~~arrots").
62. Encourage staff (promoters, volunteers and community health workers) to use weight graphs as the tool to monitor nutritional changes.

Annex 15: Work Schedule

Monday Aug 9, 2010

AM: met with WR/Burundi staff to begin planning process of MT evaluation

PM: interviewed financial and HR directors

Tuesday 8/10/2010

AM: met with DG interim at MOH, continued preparations

PM: drive to Kibuye; met with District supervisor; Medical director at hospital not available

Wednesday 8/11/2010

Planning for focus groups – selection of communes; review of KPC baseline and indicators plus preliminary results of monitoring and MT KPC; determined who to interview and which focus groups to organize; invited provincial medical director to be part of team. The latter delegated his provincial manager.

Prepared key questions to use for interviews and focus group discussions. Used C.O.P.E. as a reference to make sure that all areas were covered – added IEC material questions. Determined who would be part of which team. Informed health center personnel, scheduled meetings with each focus group except for mothers coming for immunizations (to be done on arrival at health center). See summary of data for the questions used with each group.

Thursday 8/12/2010

Teams went to each commune to interview head nurse of health center as well as a focus group with mothers at the immunization clinics. Commune administrators have just been elected and were not available for interviews.

PM: focus groups with WR supervisors; TPS/MOH; interviews of Medical Director at hospital and District Administrator

Debriefed and summarized data collected by each team; discussed some of the results; reviewed challenges and next day's activities. Discussions taped.

Friday 8/13/2010

Teams went out to have focus groups with CHWs in AM and pastor Care Groups in PM. PC interviewed district HIS and Health Supervisors.

Same approach to data collected as Thursday

Saturday 8/14/2010

2 focus groups for promoters – made sure that WR/Burundi staff was not part of focus groups. Debriefing as previously done. PM - wedding

Sunday 8/15/2010

AM – rest; PM – focus group of each COSA; then debriefing as previously

Monday 8/16/2010

AM and most of PM: observation of promoters conducting meetings; focus groups of volunteers and NKs; home visits with volunteers and PD Hearth volunteers to interview mothers and observe behavior change per key messages.

Checked that key people had been invited for debriefing meetings.

Evening: debriefed visits, etc.

Tuesday 8/17/2010

Synthesis of data collected: each pair had a particular group to review and then indicate on flipchart key ideas for synthesis categories. If an idea was expressed by more than one

group, added a check mark. This helped determined which ideas were expressed most frequently. Verbal analysis of ideas then led to recommendations. Note: District supervisor unable to come, so asked HIS manager to replace him for Tuesday and Wednesday activities. She had EPI coverage data available.
Group interviewed HealthNet TPO district manager.
Wednesday 8/18/2010
AM: finalized recommendations; determined which priority recommendations needed to be included in the debriefing meetings at provincial and national MOH meetings; same for USAID, partners and WR. Reviewed preliminary monitoring graphs prepared by Melene.
PM: Debriefed Medecin Chef Provincial in Gitega; and continued to Bujumbura
Evening: Interviewed WR/Burundi Director
Thursday 8/19/2010
AM: Debriefed WR/Burundi staff and evaluated MT evaluation process
PM: Met with Marie Bukuru, Head Nurse at Prince Regent Hospital; debriefed MOH staff